

LOCUS MAP:
1" = 600'

**DIMENSIONS FOR INNER RESIDENTIAL &
AGRICULTURAL ZONING DISTRICT (IRA)**

SETBACK	REQUIRED
AREA	40,000 SF
FRONTAGE	150 FT.
DEPTH	150 FT.
WIDTH	120 FT. AT BUILDING LINE
FRONT	20 FT.
SIDE	15 FT.
REAR	40 FT.
HEIGHT/STORIES	35 FT./2.5
MAXIMUM BUILDING AREA	25%
MINIMUM OPEN SPACE	50%

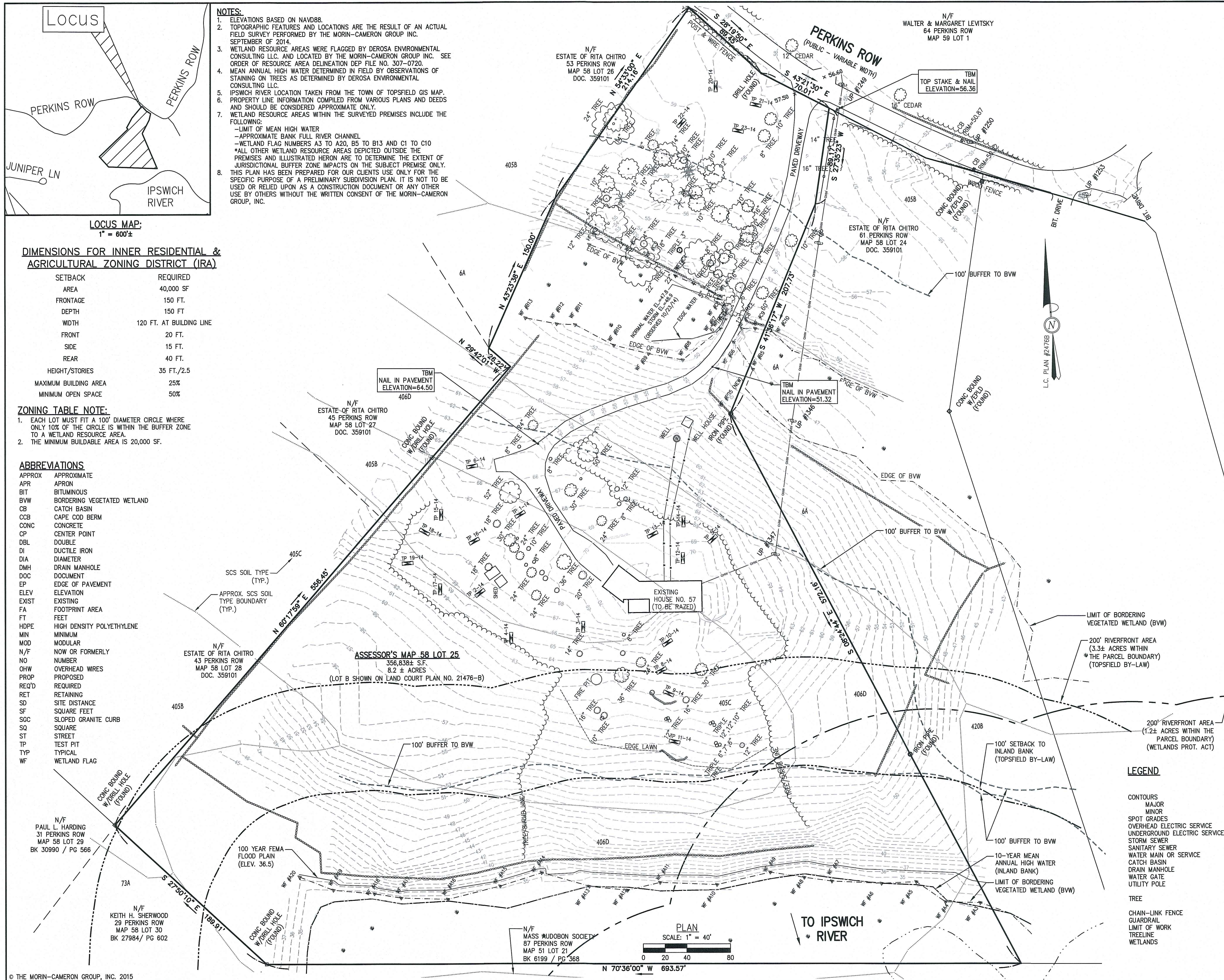
ZONING TABLE NOTE:

1. EACH LOT MUST FIT A 100' DIAMETER CIRCLE WHERE ONLY 10% OF THE CIRCLE IS WITHIN THE BUFFER ZONE TO A WETLAND RESOURCE AREA.
2. THE MINIMUM BUILDABLE AREA IS 20,000 SF.

ABBREVIATIONS

APPROX	APPROXIMATE
APR	APRON
BIT	BITUMINOUS
BVW	BORDERING VEGETATED WETLAND
CB	CATCH BASIN
CCB	CAPE COD BERM
CONC	CONCRETE
CP	CENTER POINT
DBL	DOUBLE
DI	DUCTILE IRON
DIA	DIAMETER
DMH	DRAIN MANHOLE
DOC	DOCUMENT
EP	EDGE OF PAVEMENT
ELEV	ELEVATION
EXIST	EXISTING
FA	FOOTPRINT AREA
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
MIN	MINIMUM
MOD	MODULAR
N/F	NOW OR FORMERLY
NO	NUMBER
OHW	OVERHEAD WIRES
PROP	PROPOSED
REQ'D	REQUIRED
RET	RETAINING
SD	SITE DISTANCE
SF	SQUARE FEET
SGC	SLOPED GRANITE CURB
SO	SQUARE
ST	STREET
TP	TEST PIT
TYP	TYPICAL
WF	WETLAND FLAG

- NOTES:**
1. ELEVATIONS BASED ON NAVD88.
 2. TOPOGRAPHIC FEATURES AND LOCATIONS ARE THE RESULT OF AN ACTUAL FIELD SURVEY PERFORMED BY THE MORIN-CAMERON GROUP INC. SEPTEMBER OF 2014.
 3. WETLAND RESOURCE AREAS WERE FLAGGED BY DEROSA ENVIRONMENTAL CONSULTING LLC. AND LOCATED BY THE MORIN-CAMERON GROUP INC. SEE ORDER OF RESOURCE AREA DELINEATION DEP FILE NO. 307-0720.
 4. MEAN ANNUAL HIGH WATER DETERMINED IN FIELD BY OBSERVATIONS OF STAINING ON TREES AS DETERMINED BY DEROSA ENVIRONMENTAL CONSULTING LLC.
 5. IPSWICH RIVER LOCATION TAKEN FROM THE TOWN OF TOPSFIELD GIS MAP. PROPERTY LINE INFORMATION COMPILED FROM VARIOUS PLANS AND DEEDS AND SHOULD BE CONSIDERED APPROXIMATE ONLY.
 6. WETLAND RESOURCE AREAS WITHIN THE SURVEYED PREMISES INCLUDE THE FOLLOWING:
 - LIMIT OF MEAN HIGH WATER
 - APPROXIMATE BANK FULL RIVER CHANNEL
 - WETLAND FLAG NUMBERS A3 TO A20, B5 TO B13 AND C1 TO C10
 - *ALL OTHER WETLAND RESOURCE AREAS DEPICTED OUTSIDE THE PREMISES AND ILLUSTRATED HERON ARE TO DETERMINE THE EXTENT OF JURISDICTIONAL BUFFER ZONE IMPACTS ON THE SUBJECT PREMISE ONLY.
 7. THIS PLAN HAS BEEN PREPARED FOR OUR CLIENTS USE ONLY FOR THE SPECIFIC PURPOSE OF A PRELIMINARY SUBDIVISION PLAN. IT IS NOT TO BE USED OR RELIED UPON AS A CONSTRUCTION DOCUMENT OR ANY OTHER USE BY OTHERS WITHOUT THE WRITTEN CONSENT OF THE MORIN-CAMERON GROUP, INC.



**PLAN TO ACCOMPANY A
NOTICE OF INTENT**
AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

**The
Morin-Cameron
GROUP, INC.**

CIVIL ENGINEERS / ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS / LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01963
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

OWNER/APPLICANT:
NEW MEADOWS DEVELOPMENT, LLC
60 NORTH MAIN STREET
MIDDLETON, MA 01949

**TOTAL PARCEL AREA 356,838± S.F.
8.2± ACRES**

PLAN & DEED REFERENCES:

1. LAND COURT CERTIFICATE NO. 87747.
2. LAND COURT PLAN 21476-B.
3. DOCUMENT NO. 107106

ANTICIPATED PERMITS:

1. FORM C: DEFINITIVE SUBDIVISION
2. ORDER OF CONDITIONS
3. TOPSFIELD STORMWATER AND EROSION CONTROL PERMIT
4. EPA NPDES PERMIT

SCHEDULE OF PLAN SET DRAWINGS:

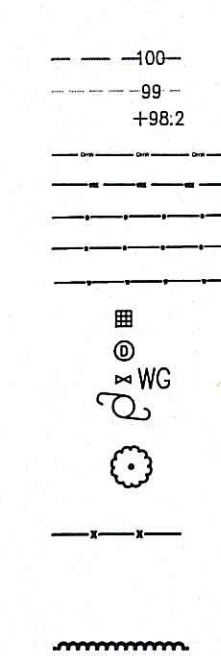
1. EXISTING CONDITIONS PLAN
2. SITE PLAN
3. ROAD PLAN, SECTIONS & PROFILE
4. CONSTRUCTION DETAILS
5. CONSTRUCTION DETAILS
6. CONSTRUCTION DETAILS
7. SOIL TEST LOGS
8. MITIGATION & PLANTING PLANS
9. MITIGATION & PLANTING PLANS



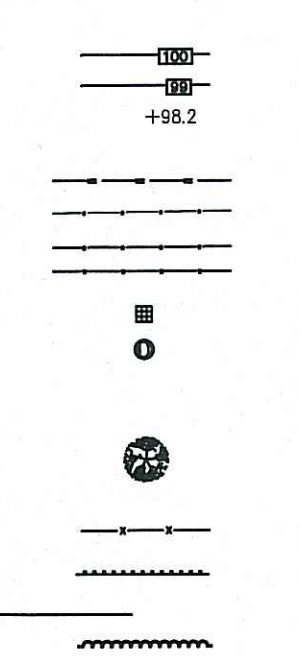
LEGEND

CONTOURS
MAJOR
MINOR
SPOT GRADES
OVERHEAD ELECTRIC SERVICE
UNDERGROUND ELECTRIC SERVICE
STORM SEWER
SANITARY SEWER
WATER MAIN OR SERVICE
CATCH BASIN
DRAIN MANHOLE
WATER GATE
UTILITY POLE
TREE
CHAIN-LINK FENCE
GUARDRAIL
LIMIT OF WORK
TREELINE
WETLANDS

EXISTING



PROPOSED



**EXISTING
CONDITIONS PLAN**

DRAWING NO.

1 OF 9

PROJ. #3274
DRAWING: 3274 MAIN

EROSION AND SEDIMENTATION CONTROL:

WIDELY ACCEPTED PRACTICES FOR REDUCING EROSION AND SEDIMENTATION WILL BE EMPLOYED IN THE DEVELOPMENT OF THIS SITE. REFER TO THE CONSTRUCTION PERIOD POLLUTION PREVENTION PLAN FOR THE PROJECT.

1. THE DEVELOPMENT OF THE SITE HAS BEEN PLANNED TO MATCH EXISTING TOPOGRAPHY AND GROUND COVER. EXISTING DRAINAGE PATTERNS OF THE SITE HAVE BEEN MAINTAINED TO THE EXTENT PRACTICABLE.
2. STEEP SLOPES, WHERE POSSIBLE, WILL NOT BE DISTURBED.
3. NATURAL WETLANDS WILL BE PRESERVED AND PROTECTED, AND EXISTING VEGETATION WILL BE RETAINED AND PROTECTED TO THE EXTENT POSSIBLE.
4. THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED LAND TO THE EXTENT FEASIBLE.
5. SEDIMENT CONTROL MEASURES WILL BE APPLIED TO CONTROL ANY SEDIMENTS THAT MAY BE PRODUCED AS A RESULT OF SITE CONSTRUCTION ACTIVITIES. EROSION AND DEPOSITION OF SEDIMENT WILL BE CLOSELY MONITORED DURING CONSTRUCTION.
6. TEMPORARY EROSION CONTROL MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO, FILTER FABRIC SILT FENCES, SEEDING AND MULCHING, SEEDED FILTER STRIPS AND SILT SACKS IN CATCH BASINS(EXISTING AND NEWLY INSTALLED).
7. TOPSOIL STRIPPED FROM THE SITE WILL BE STOCKPILED FOR LOAMING AND SEEDING AT LATER CONSTRUCTION STAGES. THE STOCKPILES SHALL BE LOCATED SO AS TO ACT AS TEMPORARY DIVERSIONS, GENERALLY ON AN UPHILL SLOPE.
8. SITE DEVELOPMENT WILL NOT COMMENCE UNTIL ALL TEMPORARY EROSION CONTROL MEASURES ARE IN PLACE. THESE MEASURES SHALL BE EMPLOYED UNTIL FINAL PAVING IS COMPLETED AND ADEQUATE VEGETATION HAS BEEN ESTABLISHED.
9. THE OWNER IS RESPONSIBLE FOR CONDUCTING WEEKLY ENVIRONMENTAL MONITORING DURING CONSTRUCTION AND ANY CONDITIONS SET FORTH AS REQUIRED BY THE TOPSFIELD CONSERVATION COMMISSION.
10. THE TOPSFIELD CONSERVATION COMMISSION SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO INSPECT EROSION CONTROLS TO BE IMPLEMENTED DURING CONSTRUCTION.
11. THE CONSTRUCTION PHASE MUST COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY(EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROTOCOLS. AN EPA NOTICE OF INTENT SHALL BE FILLED OUT AT LEAST 2 WEEKS PRIOR TO THE START OF CONSTRUCTION.

STORM DRAIN NOTES:

1. STORMWATER CONVEYANCE PIPES SHALL BE HDPE (ADS N-12) PIPE UNLESS NOTED OTHERWISE.
2. BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY BY AASHTO T-180D METHOD.
3. SHEETING, IF USED, SHALL BE REMOVED PRIOR TO BACKFILLING TRENCH.
4. UNSUITABLE SOIL BELOW THE INVERT SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL AND SHALL NOT BE USED AS BACKFILL.
5. UNSUITABLE MATERIALS SHALL BE REMOVED FROM BENEATH THE INFILTRATION FACILITY AND REPLACED WITH CLEAN, GRANULAR FILL MEETING THE SPECIFICATIONS SET FORTH IN THE 310 CMR 15.00: TITLE V REGULATIONS.

SITE PLAN NOTES:

1. FOR CONCEPTUAL LOT GRADING, DWELLING PLACEMENT, AND SEPTIC SYSTEM AND DRYWELL LOCATIONS, REFER TO THE DEFINITIVE SUBDIVISION PLAN SET AND STORMWATER MANAGEMENT SUMMARY OF THE SAME COVER AND SUBMITTED TO THE PLANNING BOARD, PREPARED BY THE MORIN-CAMERON GROUP, INC.
2. SUBDRAINS SHALL BE INSTALLED WITHIN CUT AREAS AT THE LOCATIONS SHOWN.
3. REFER TO ROADWAY PLAN AND PROFILE FOR PROPOSED UTILITIES INCLUDING WATER SYSTEM, STORM SEWER SYSTEM, CULVERTS AND UNDERGROUND ELECTRIC, TELEPHONE AND COMMUNICATION CONDUITS.

PLAN TO ACCOMPANY A
NOTICE OF INTENT

AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

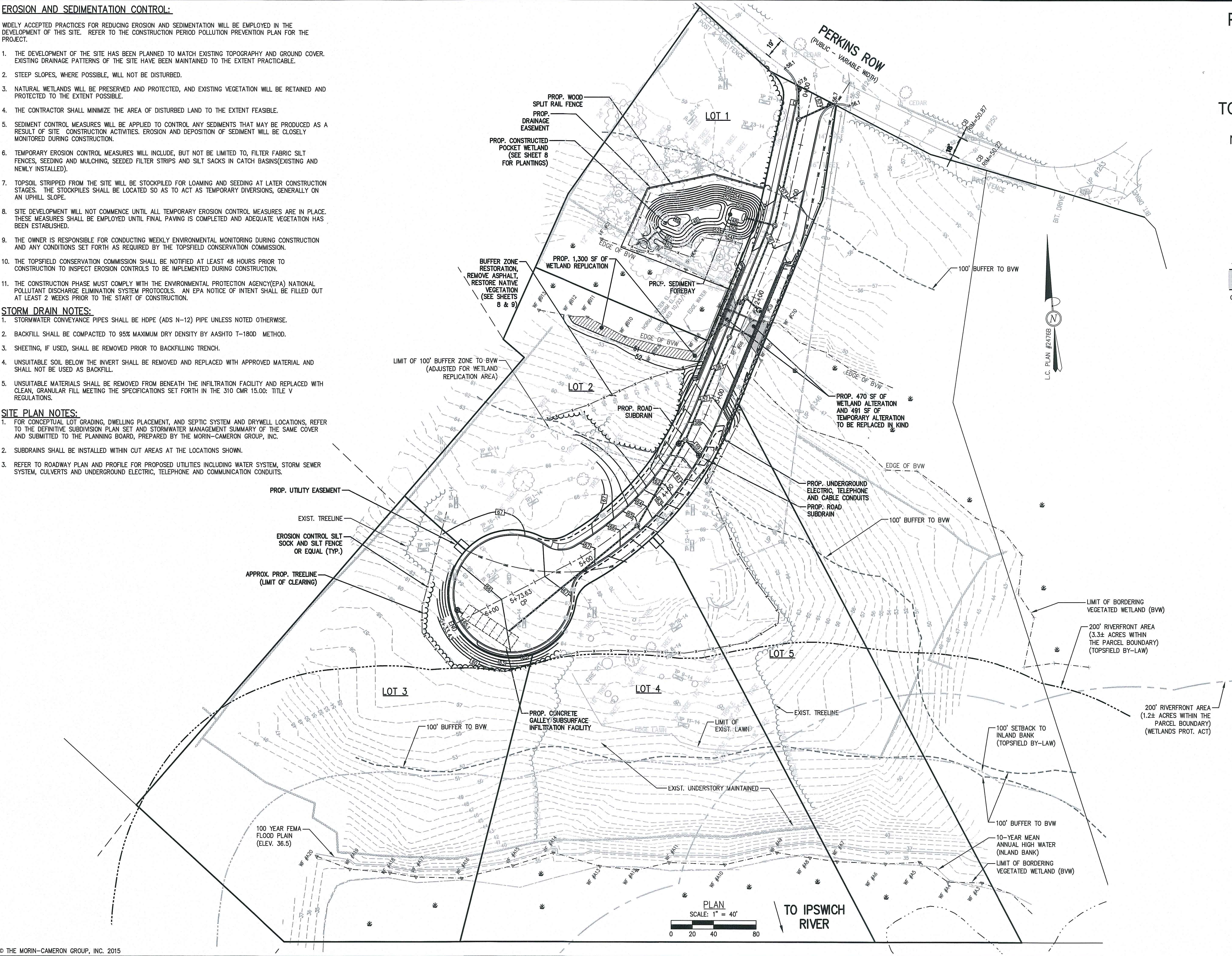
REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

The
Morin-Cameron
GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P. 978-887-8386, F. 978-887-3480, W. WWW.MORINCAMERON.COM



PLAN TO ACCOMPANY A NOTICE OF INTENT AT 57 PERKINS ROW IN TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

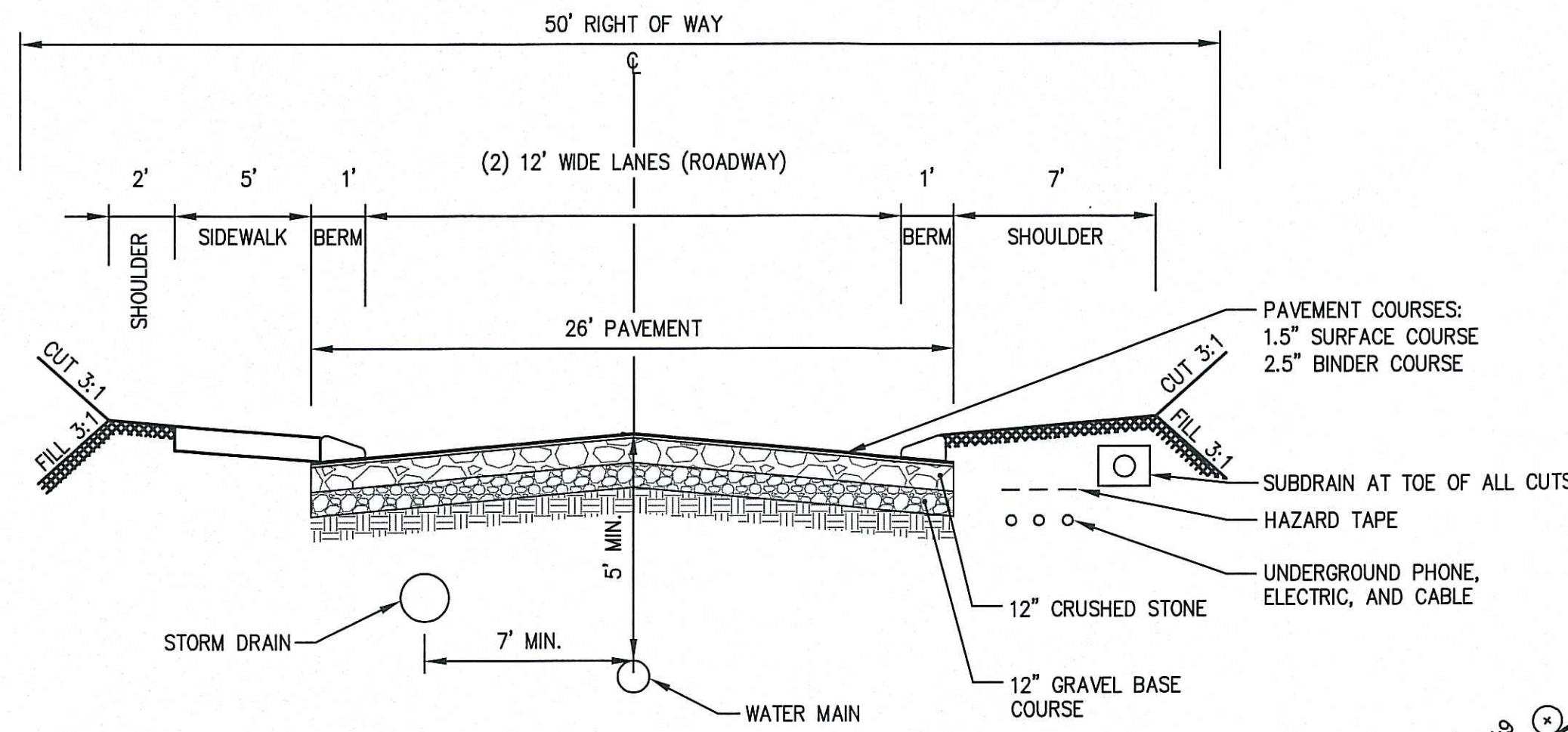
REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

The
Morin-Cameron
GROUP, INC.

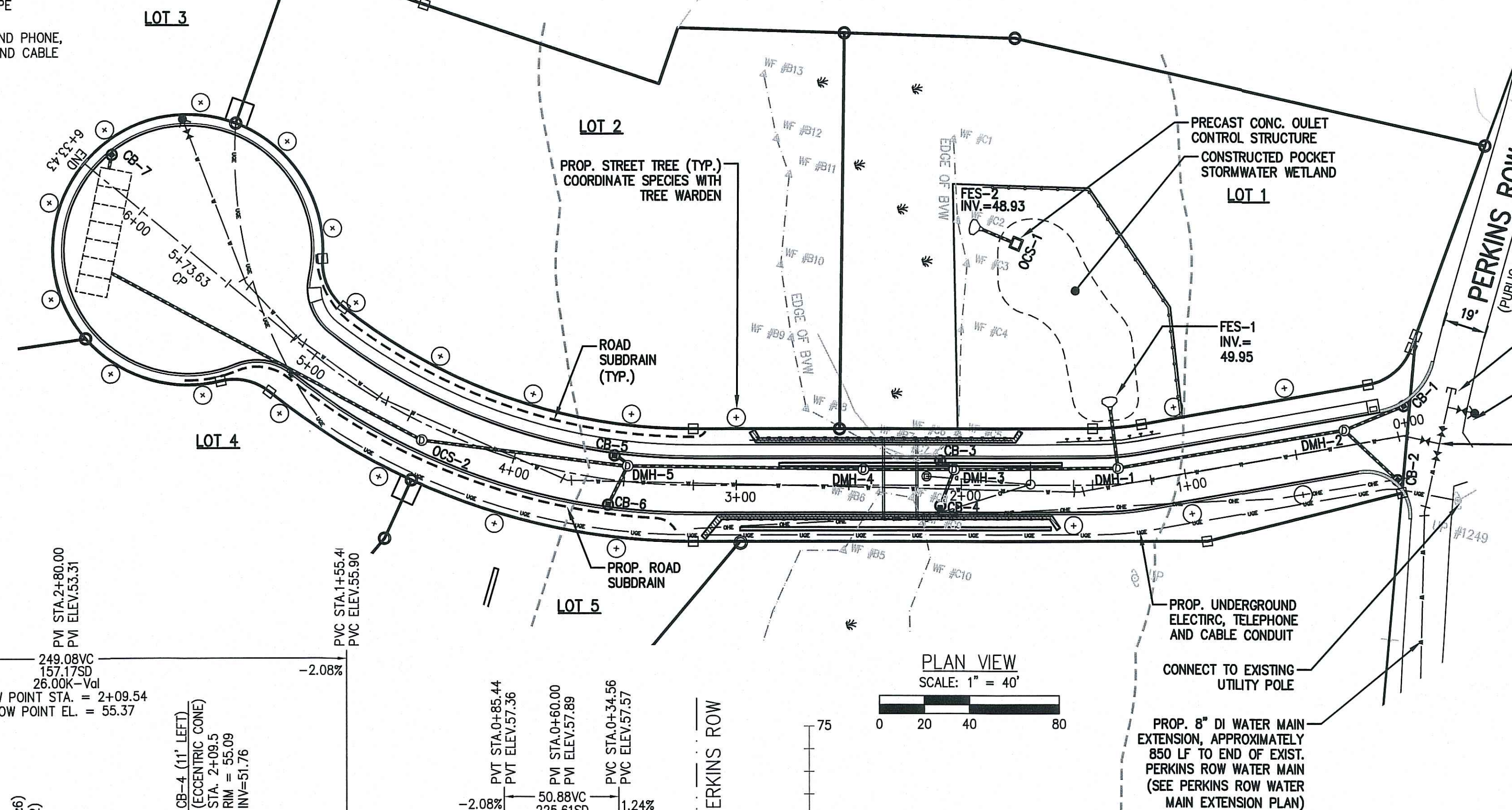
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01863
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



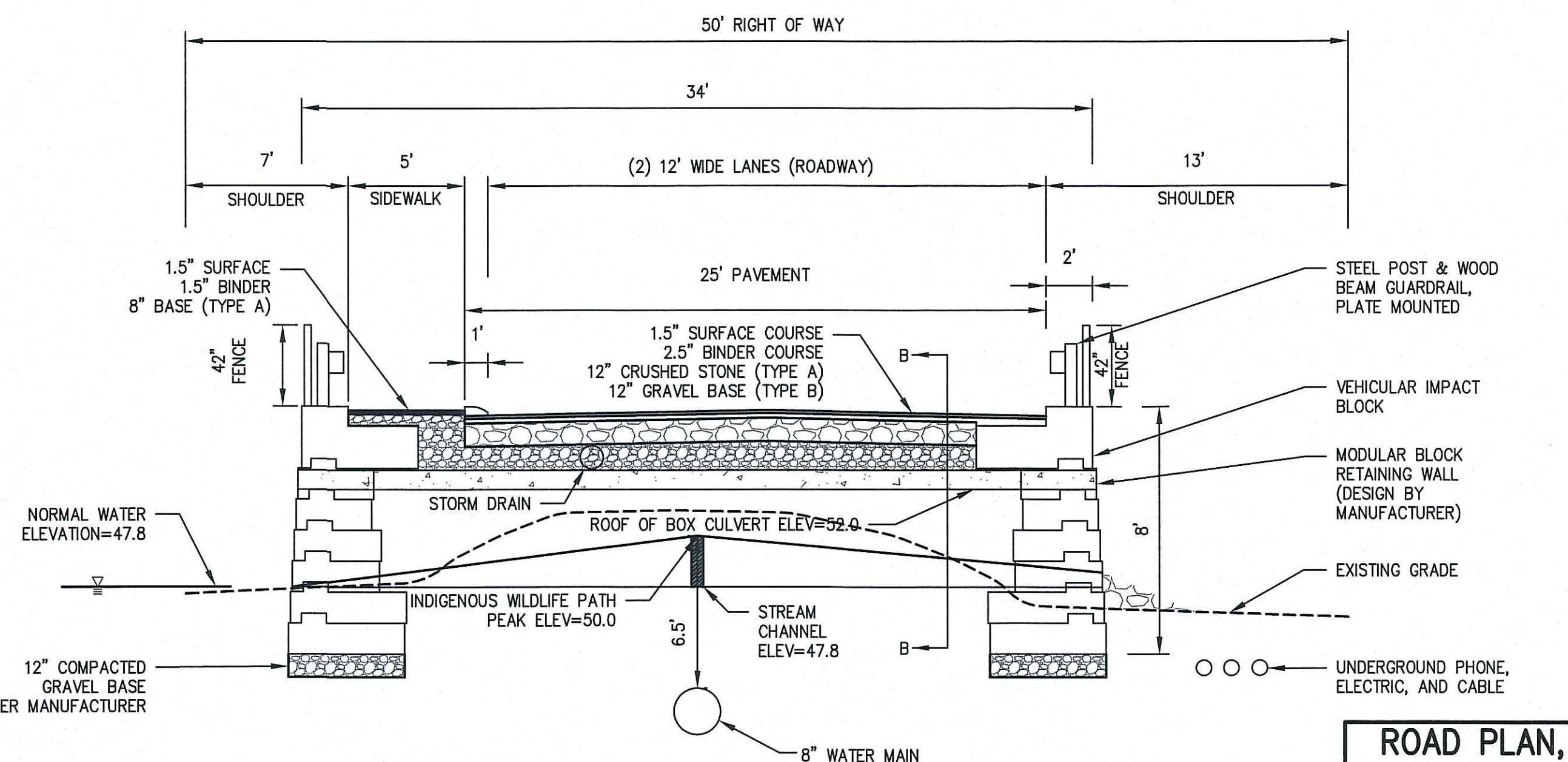
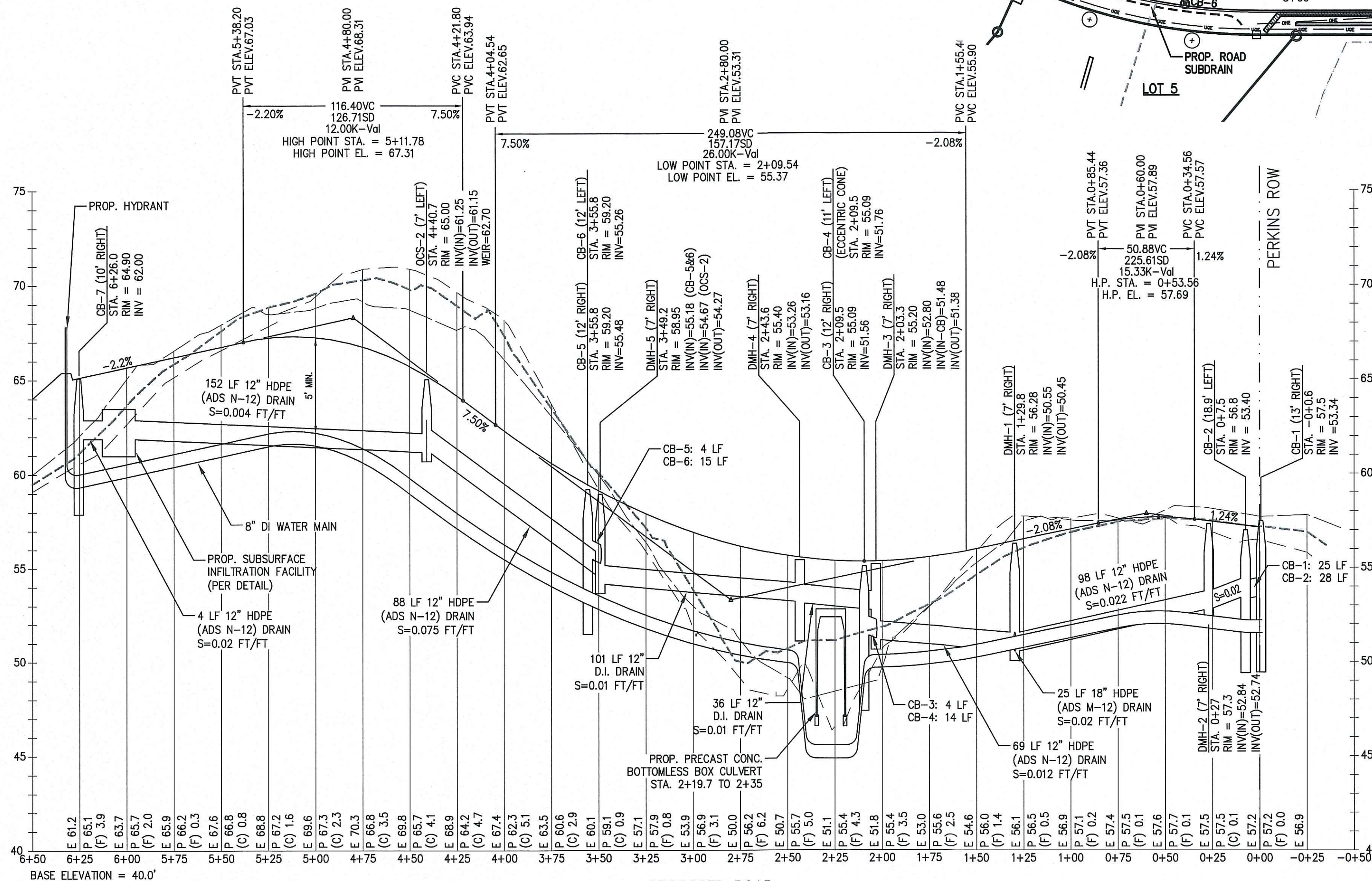
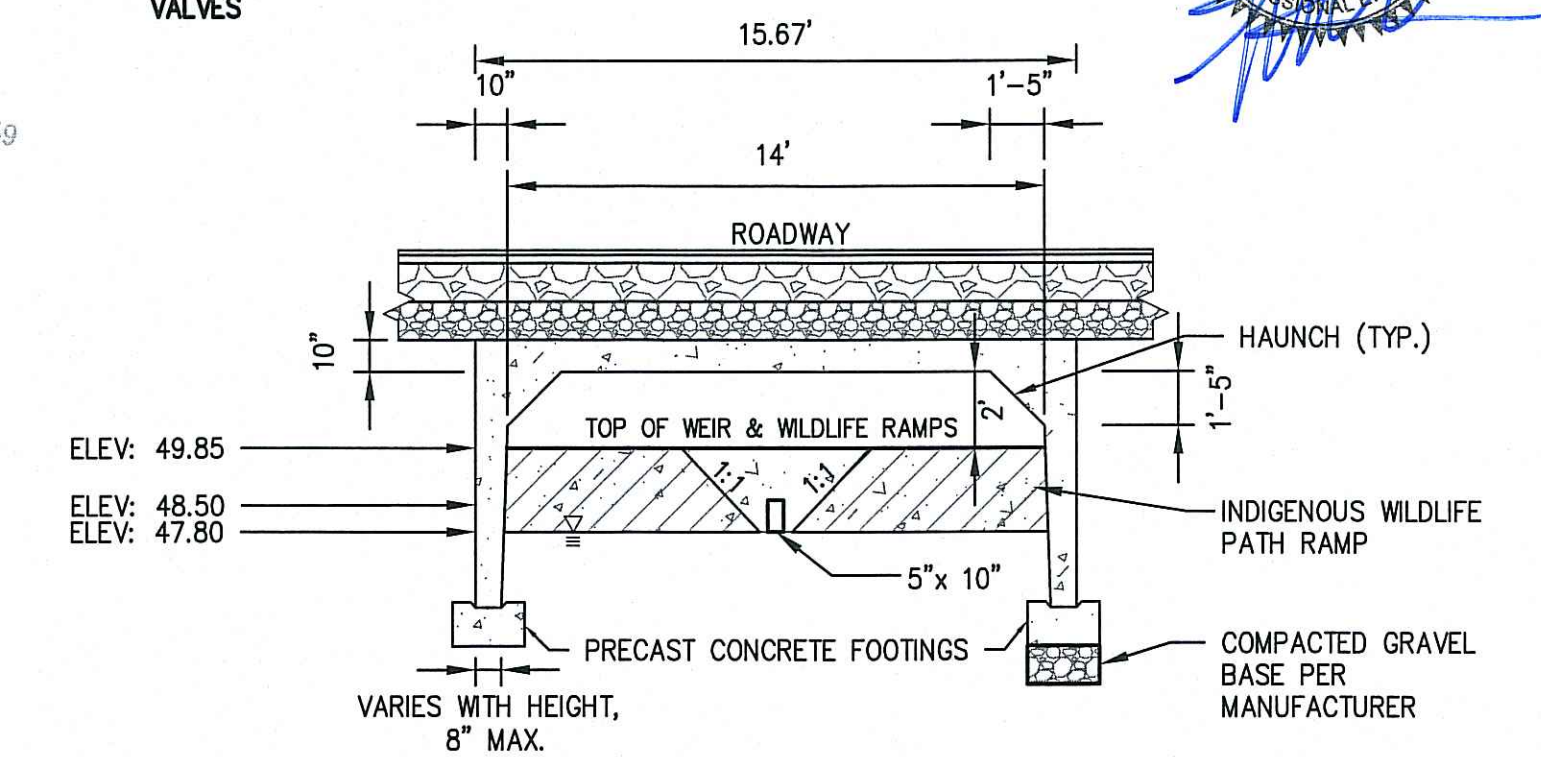
ROAD CROSS SECTION NOTES:

- ALL SLOPED SURFACES ARE TO BE GRADED AT A MINIMUM SLOPE OF 1/4" VERTICALLY PER 1' HORIZONTALLY.
- ANY UNSUITABLE MATERIAL, SUCH AS PEAT, LOAM, ORGANIC MATERIAL, SILT OR CLAY, AT THE DISCRETION OF THE TOPSFIELD DPW SUPERINTENDENT, SHALL BE REMOVED AND REPLACED WITH ORDINARY BORROW CONFORMING TO MASSDOT STANDARD SPECIFICATION M1.03.0.
- ALL FILL MATERIALS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM DESIGNATION 1557-70, METHOD D.

TYPICAL ROAD CROSS SECTION
(NOT TO SCALE)



- PROP. 8" DI END CAP
- PROP. HYDRANT AND 6" DI GATE VALVE
- PROP. 8"x8"x8" DI TEE PROP. (3) 8" DI GATE VALVES
- PROP. UNDERGROUND ELECTRIC, TELEPHONE AND CABLE CONDUIT
- CONNECT TO EXISTING UTILITY POLE
- PROP. 8" DI WATER MAIN EXTENSION, APPROXIMATELY 850 LF TO END OF EXIST. PERKINS ROW WATER MAIN (SEE PERKINS ROW WATER MAIN EXTENSION PLAN)



ROAD PLAN,
SECTIONS &
PROFILE

DRAWING NO.

3 OF 9

PLAN TO ACCOMPANY A NOTICE OF INTENT

AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

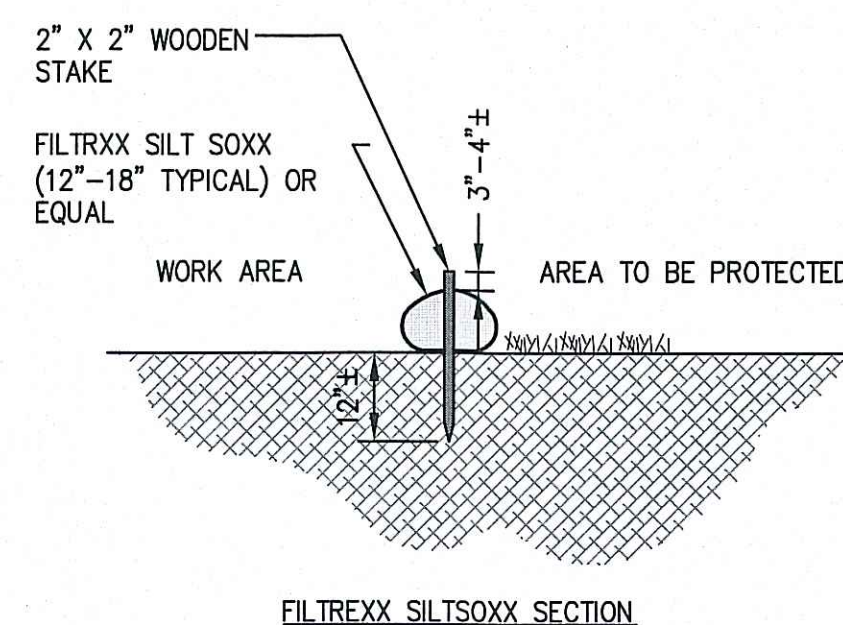
REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

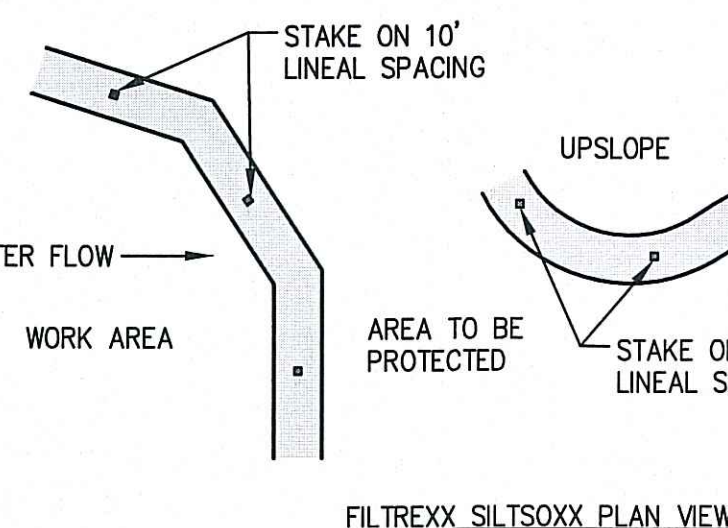
The
Morin-Cameron
GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01963
P. 978-887-8586, F. 978-887-3480, W. WWW.MORINCAMERON.COM

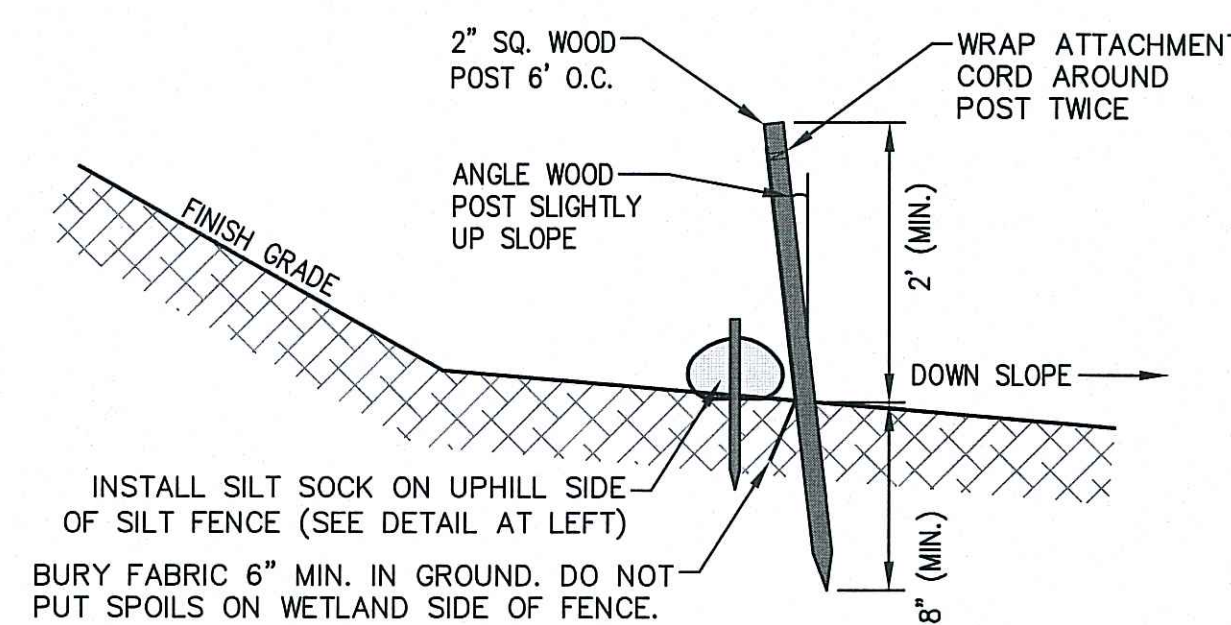


FILTRXX SILT SOCK SECTION

SILT SOCK
(NOT TO SCALE)

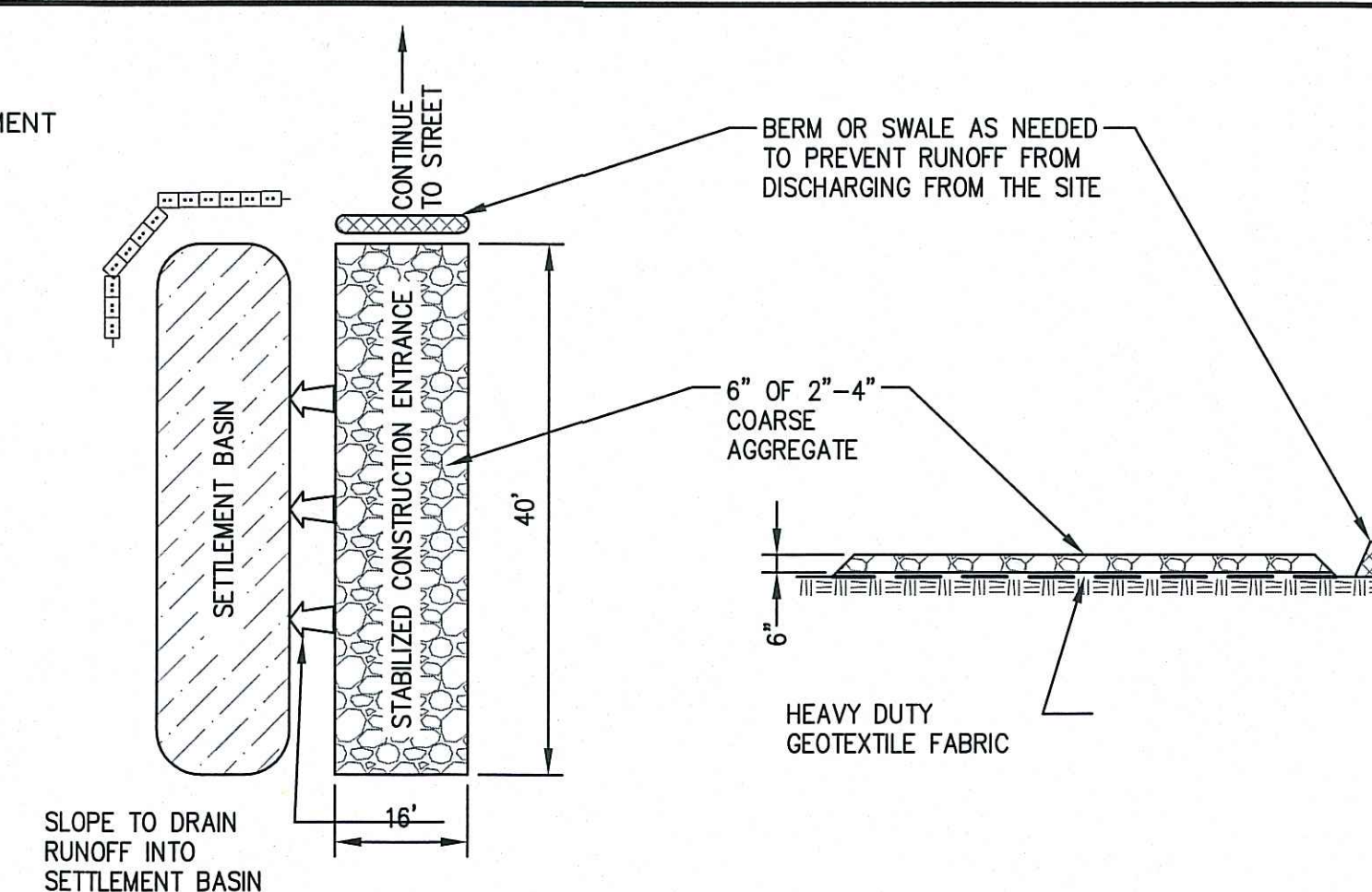


FILTRXX SILT SOCK PLAN VIEW



- INSTALL SILT SOCK ON UPHILL SIDE OF SILT FENCE (SEE DETAIL AT LEFT)
BURY FABRIC 6" MIN. IN GROUND. DO NOT PUT SPOILS ON WETLAND SIDE OF FENCE.
- NOTES
1. SILT FENCE TO BE INSTALLED AROUND LIMIT OF WORK TO PREVENT OFFSITE MIGRATION OF SEDIMENT DURING CONSTRUCTION.

SILT FENCE
(NOT TO SCALE)



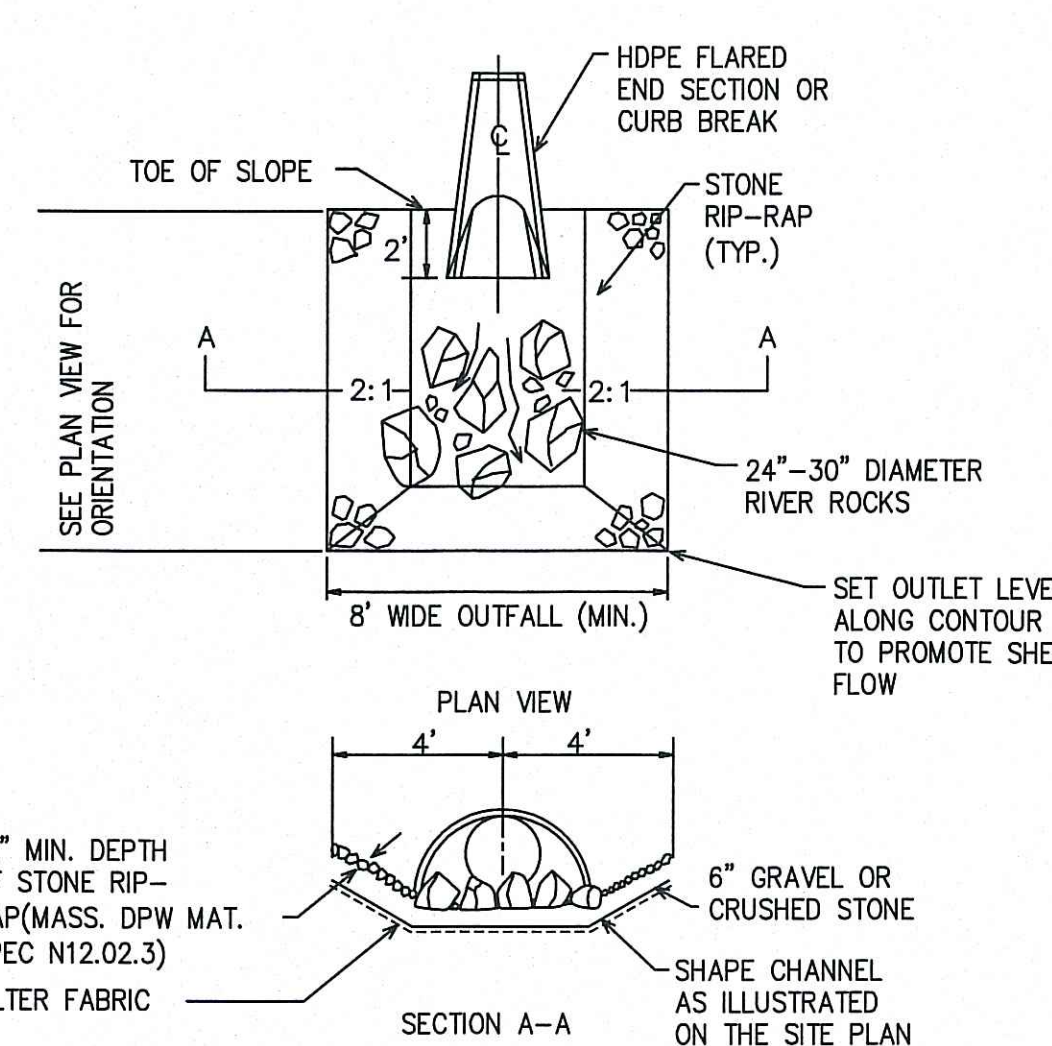
PLAN

PROFILE

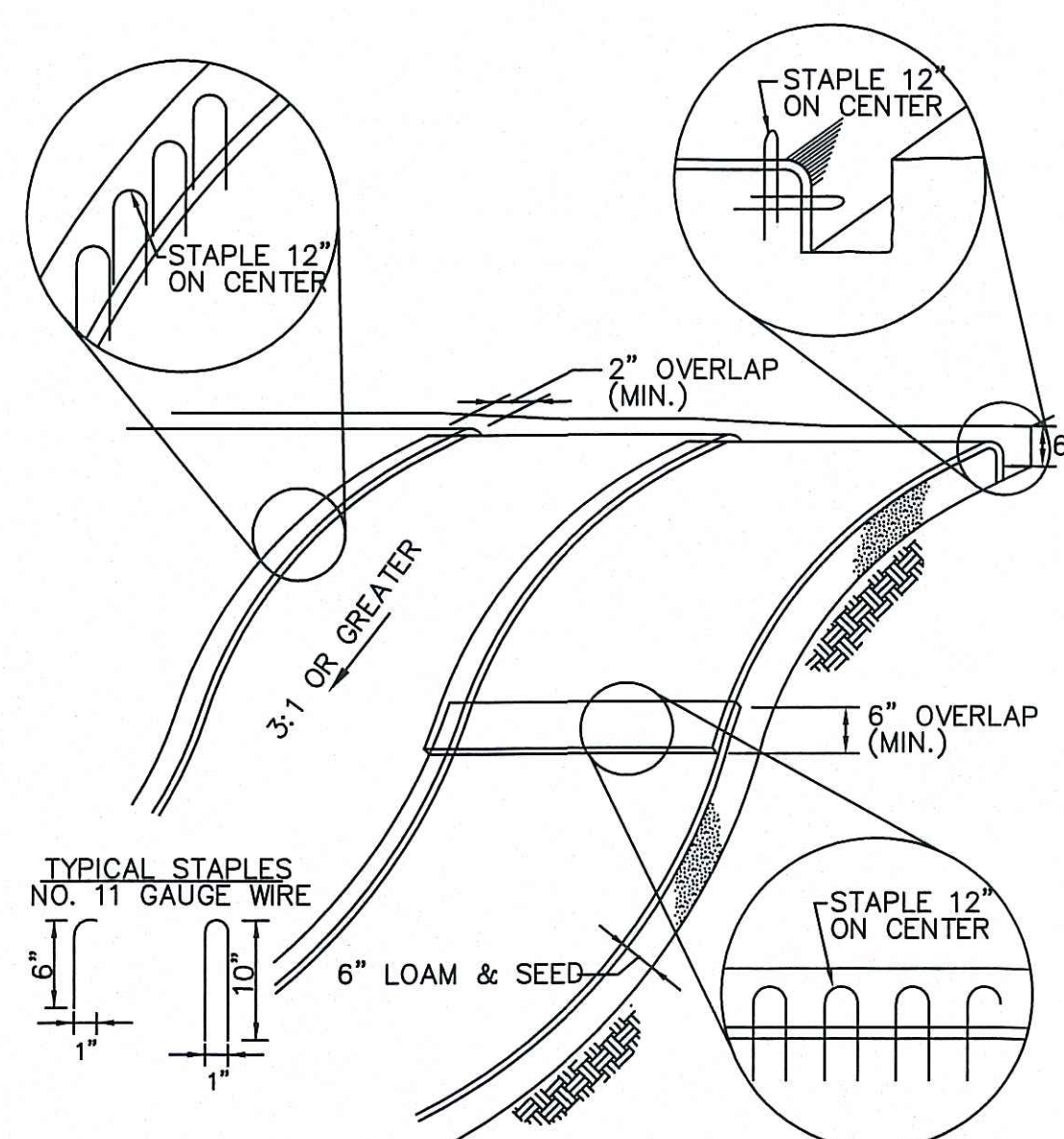
CONSTRUCTION ENTRANCE SPECIFICATIONS:

1. STONE FOR STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 2-4" STONE, RECLAIMED STONE.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 40 FEET.
3. THE WIDTH OF THE ENTRANCE SHALL BE NO LESS THAN THE WIDTH OF THE INGRESS OR EGRESS DRIVE, OR 16 FEET, WHICHEVER IS GREATER.
4. GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
5. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH MINIMUM 1 TO 5 SLOPES THAT CAN BE CROSSED BY VEHICLES CAN BE SUBSTITUTED.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT, SEDIMENT SPILLED, WASHED OR TRACKED ONTO THE RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE DETAIL (NOT TO SCALE)

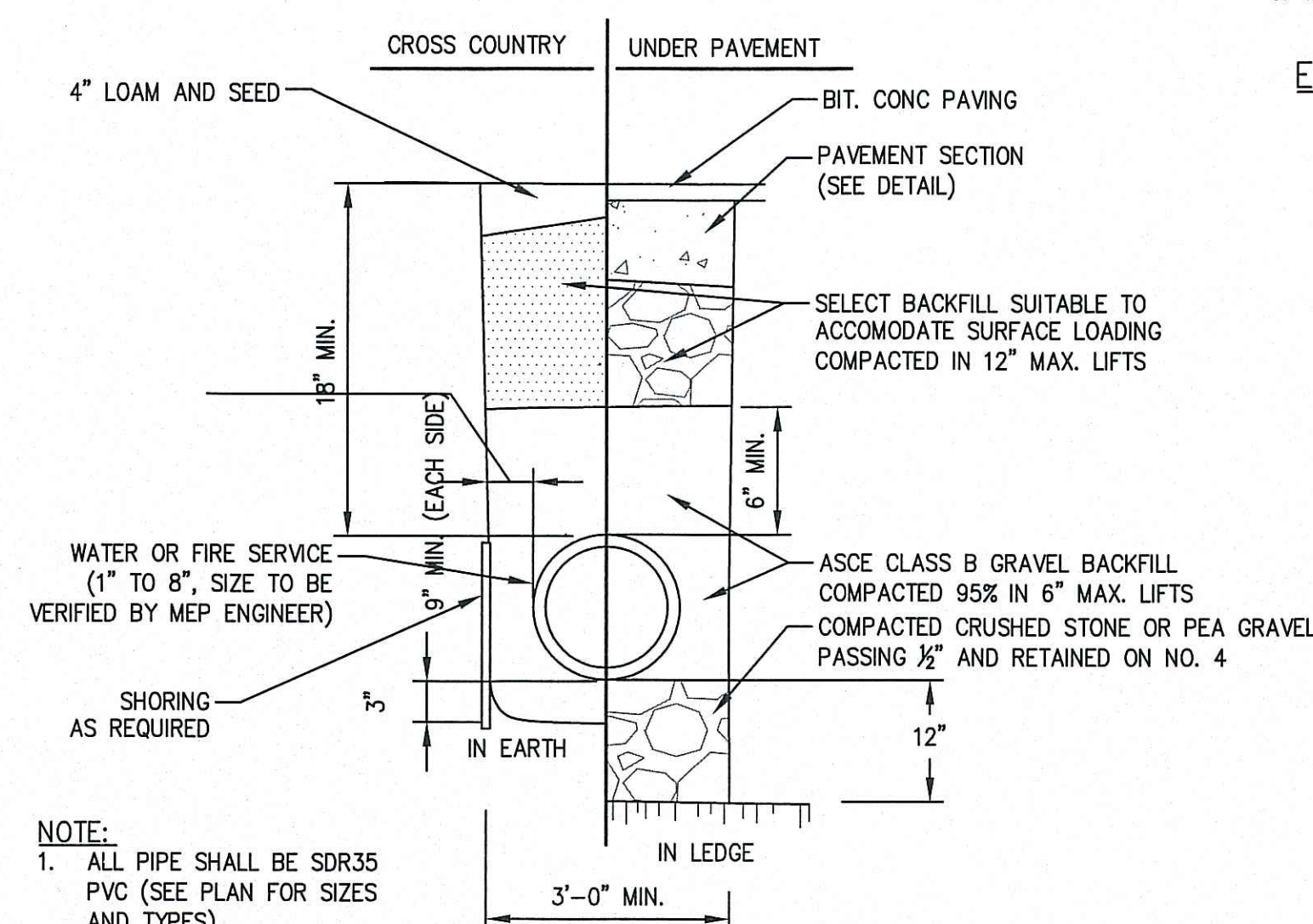


STONE ENERGY DISSIPATOR (INLET/OUTLET PROTECTION)
(NOT TO SCALE)



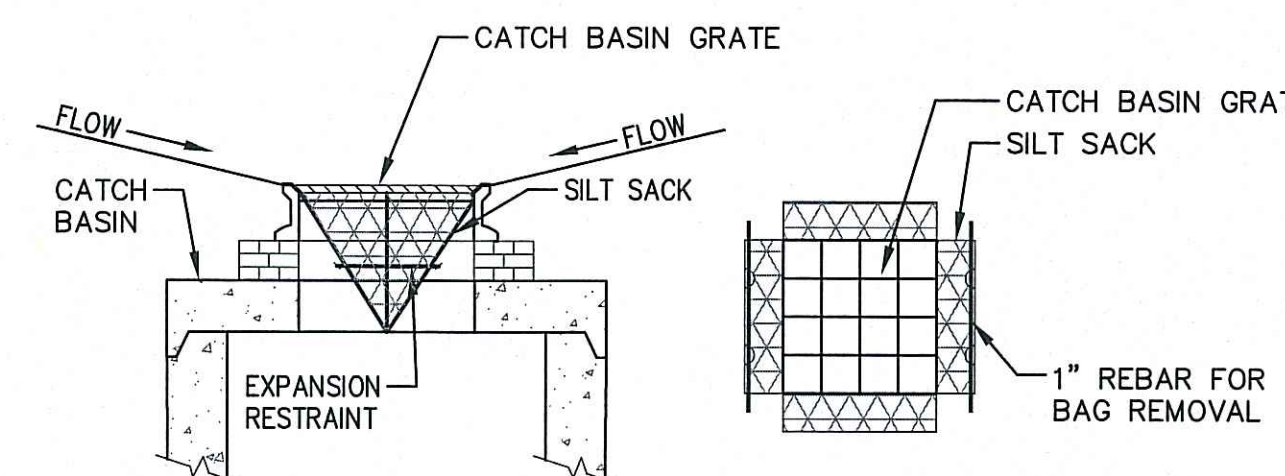
- NOTES:
1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
 2. ROLL THE BLANKET DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
 3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
 4. WHEN BLANKETS MUST BE SPICED DOWN THE SLOPE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
 5. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS.

EROSION CONTROL BLANKET SLOPE STABILIZATION
(NOT TO SCALE)



- NOTE:
1. ALL PIPE SHALL BE SDR35 PVC (SEE PLAN FOR SIZES AND TYPES)
- NOTES:
1. EXISTING CONDITIONS INFORMATION HEREON PROVIDED BY THE MORIN-CAMERON GROUP, INC. FROM A FIELD SURVEY CONDUCTED FROM AUGUST TO SEPTEMBER, 2014. PROPERTY LINES SHOULD BE CONSIDERED APPROXIMATE.
 2. WETLANDS DELINEATED BY DEROSA ENVIRONMENTAL CONSULTING, INC. IN SEPTEMBER, 2014.
 3. THIS PLAN IS SPECIFICALLY PREPARED FOR USE BY THE CLIENT FOR ESTATE PLANNING PURPOSES AND SHALL NOT BE USED FOR PERMITTING, CONSTRUCTION OR ANY OTHER USE WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MORIN-CAMERON GROUP, INC.

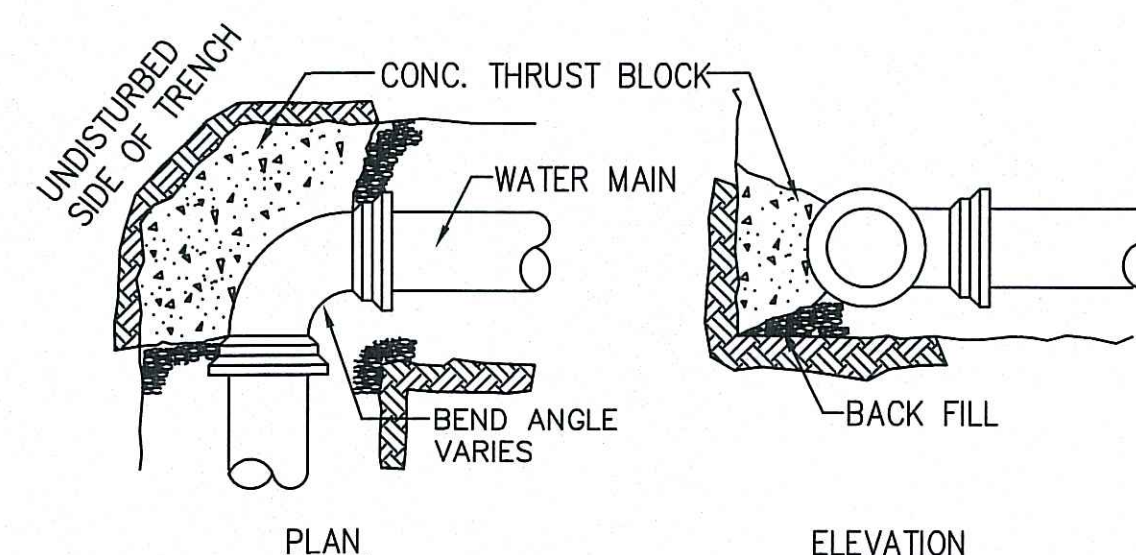
UTILITY TRENCH DETAIL
(NOT TO SCALE)



SECTION

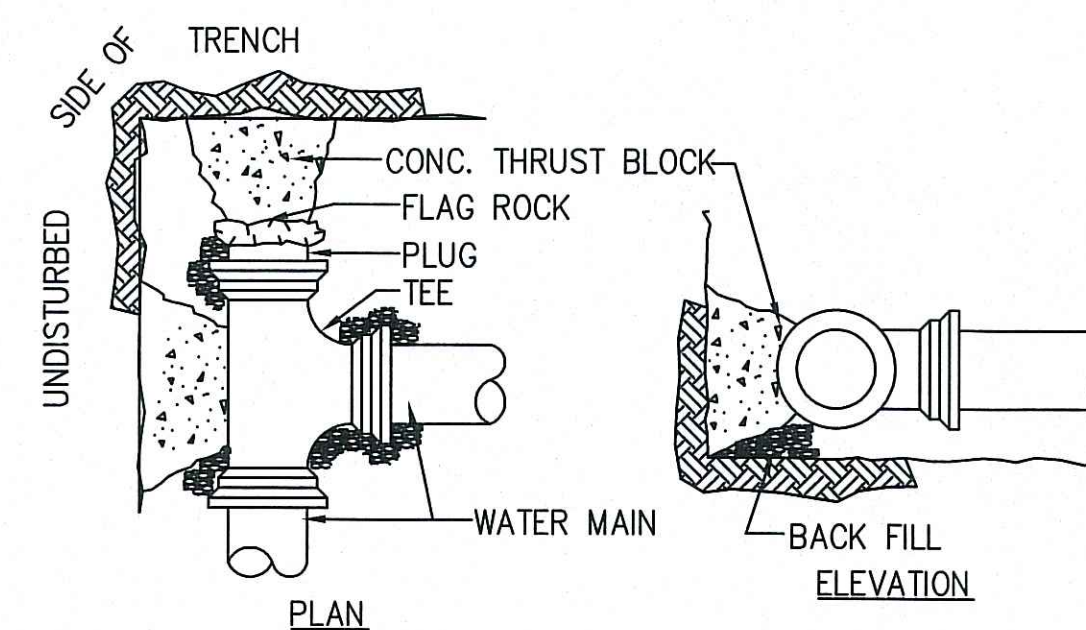
PLAN

SILT SACK SEDIMENT TRAP
(NOT TO SCALE)



PLAN

ELEVATION

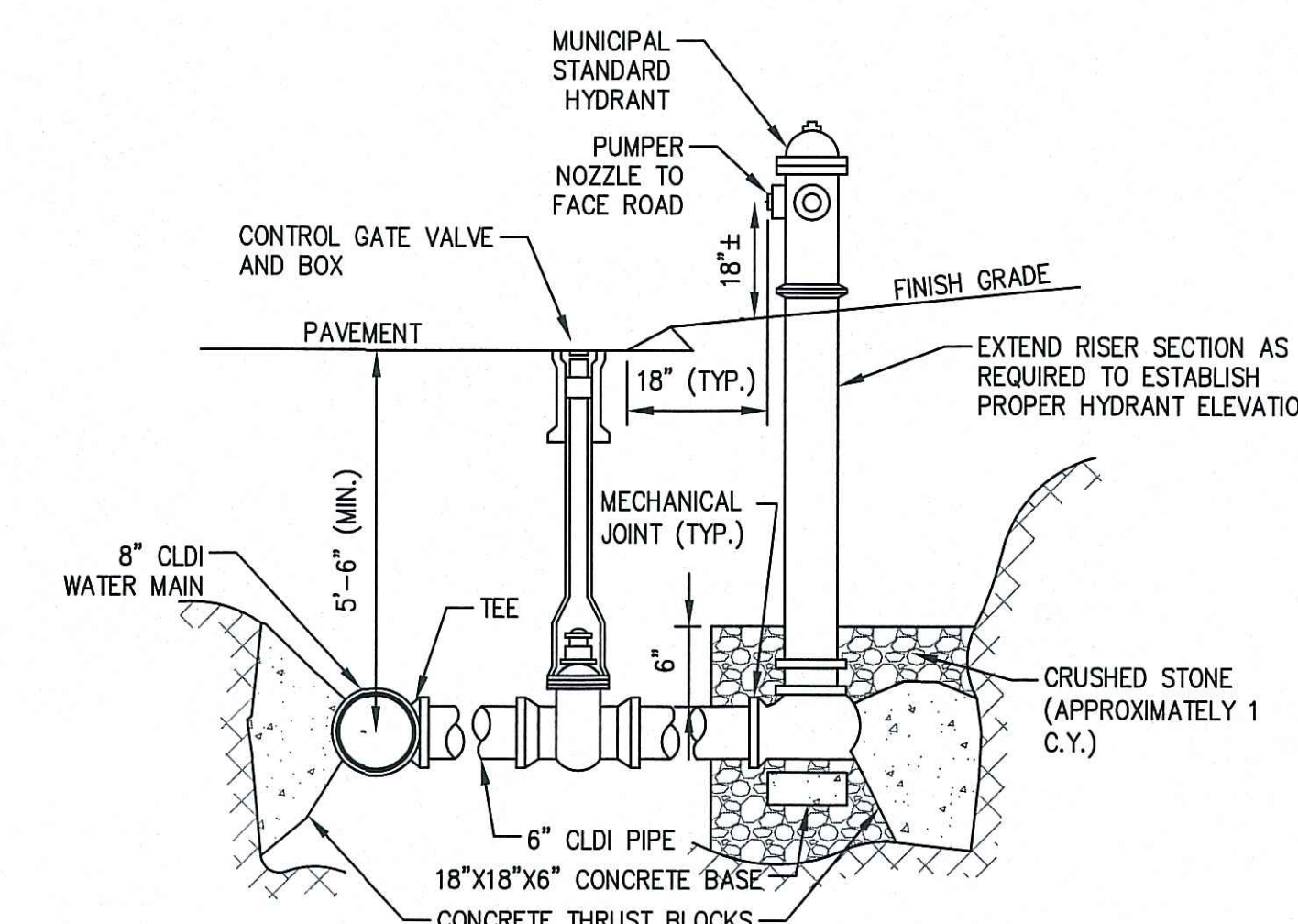


PLAN

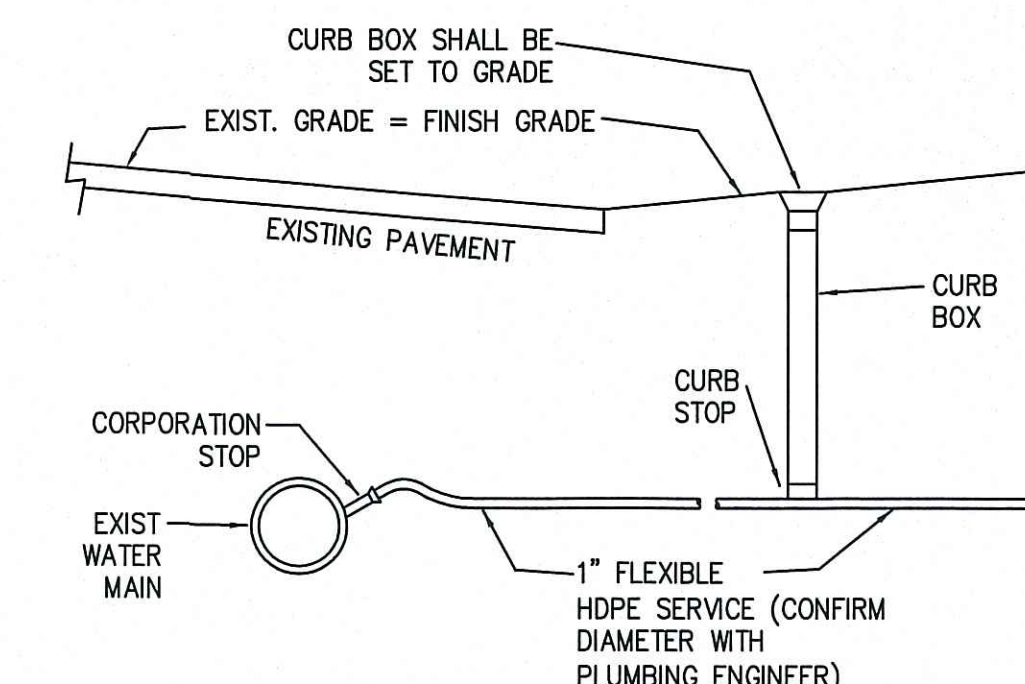
ELEVATION

- NOTES:
1. ALL WATER MAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE RESTRAINED W/ THRUST BLOCKS EXCEPT WHERE NOTED.
 2. ALL THRUST BLOCKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
 3. MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 3,000 P.S.I.
 4. KEEP CONCRETE CLEAR OF MECHANICAL JOINTS.

THRUST BLOCK DETAIL
(NOT TO SCALE)



HYDRANT DETAIL
(NOT TO SCALE)



- NOTES:
1. TAP EXISTING WATER MAIN WITH NEW CORPORATION STOP AND INSTALL NEW CURB STOP AND CURB BOX WITHIN GRASS SHOULDER IN R.O.W.
 2. SAW CUT EXISTING PAVEMENT TO MINIMIZE REPAIRS. REPLACE ASPHALT PAVEMENT TO MATCH EXISTING ELEVATIONS AND DEPTHS.

WATER SERVICE CORPORATION
(NOT TO SCALE)

CONSTRUCTION DETAILS

DRAWING NO.

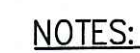
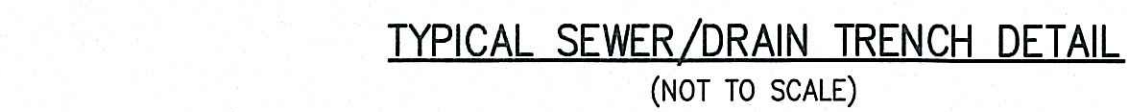
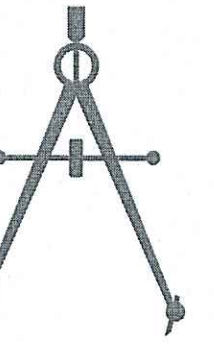
4 OF 9

PROJ. #3274
DRAWING: 3274 MAIN

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC
DATE: JUNE 25, 2015
REVISED: OCTOBER 6, 2015
SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



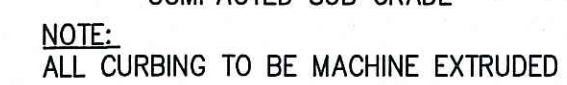
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE ALL CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY.

ACCESSIBLE CURB RAMP (ACR) TYPE 'B'
(NOT TO SCALE)



1. ADJUST FOR ANY LOCAL MODIFICATIONS TO NFPA 70/NEC

ELECTRICAL CONDUIT TRENCH DETAIL
(NOT TO SCALE)



- CAPE COD BERM (CCB)
(NOT TO SCALE)



1. REFERENCE CURRENT INSTALLATION INSTRUCTIONS FOR PROPER INSTALLATION PRACTICES.

STORM TANK STORAGE UNITS FOR HOUSE LOTS (NOT SHOWN ON PLAN)
(NOT TO SCALE)



1. THIS MODULAR BLOCK RETAINING WALL DETAIL FOR DEMONSTRATIONAL PURPOSES ONLY. REFER TO MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURES.
2. PRECAST CONCRETE MODULAR BLOCK UNIT DIMENSIONS, COLOR AND FACING CAN VARY PER CLIENT/OWNER PREFERENCE.
3. BOTTOM DRAIN SHALL DAYLIGHT AND/OR WEEP HOLES SHALL BE PROVIDED AT THE TOE OF FINISHED GRADE. THE INSTALLER SHALL TAKE CARE TO STABILIZE THE BOTTOM DRAIN DISCHARGE POINT TO PREVENT EROSION.
4. BOTTOM DRAIN SIZE SHALL BE DETERMINED IN THE FIELD BASED ON ANTICIPATED GROUNDWATER/SURFACE WATER CONDITIONS TO ENSURE ADEQUATE CAPACITY.

TYPICAL MODULAR BLOCK RETAINING WALL
(NOT TO SCALE)



DRAWING NO.

5 OF 9 |

AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

DATE: JUNE 25, 2015

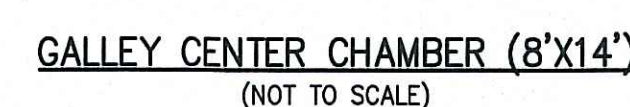
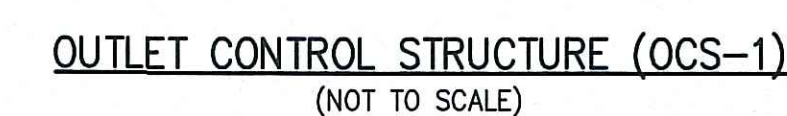
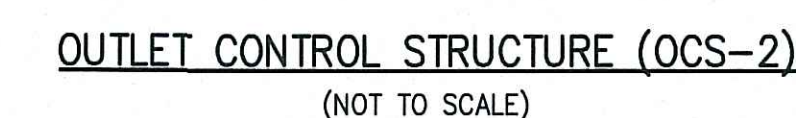
SCALE: 1"=40'

The
Morin-Cameron
GROUP, INC.

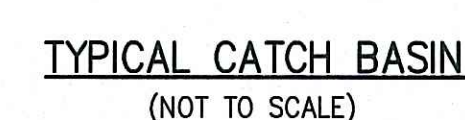


1. ENTIRE BASIN SHALL BE EXCAVATED TO THE NATIVE SOIL LAYER.
2. SEE PLANTING PLAN FOR PLANT LOCATIONS, QUANTITIES AND SPECIES AND LOAM SPECIFICATION.
3. SEE SITE PLAN FOR CONSTRUCTED WETLAND GRADING.
4. CONTRACTOR SHALL NOT DISCHARGE ANY CONSTRUCTION STORMWATERS TO CONSTRUCTED WETLAND, PROVIDE CONSTRUCTION SEDIMENT FOREBAY IN LOCATION OF PERMANENT FOREBAY WITH DISCHARGE TO WETLAND UPGRADEMENT OF CONSTRUCTED WETLAND FOOTPRINT.
5. ALL AREAS WITHIN THE CONSTRUCTED WETLAND SHALL BE FULLY STABILIZED BEFORE BEING PLACED INTO SERVICE.
6. GRADING AND PLANTING OF THE CONSTRUCTED WETLAND SHALL BE OVERSEEN BY THE PROJECT WETLAND SCIENTIST AND DESIGN ENGINEER.
7. CONTRACTOR TO PRESERVE EXISTING TREES AND VEGETATION TO EXTENT PRACTICABLE. ANY TREES REMOVED AS A RESULT OF CONSTRUCTION SHALL BE REPLACED WITH AN EQUIVALENT SPECIES OF TREE PER THE PROJECT WETLAND SCIENTIST.
8. SEED AREAS ABOVE WETLAND SYSTEM WITH EROSION CONTROL MIX. MAY REQUIRE ADDITIONAL SLOPE STABILIZATION WHILE VEGETATION BECOMES ESTABLISHED TO PREVENT EROSION.

ALL DRAIN MANHOLE COVERS SHALL BE
INSTALLED TO CONFORM WITH PITCH OF
ROADWAY AND FLUSH WITH ROAD SURFACE



- NOTES:**
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
 2. DESIGNED FOR AASHTO HS-20 LOAD, 0 TO 5 FT COVER.
 3. END & SIDE UNITS DO NOT HAVE FLOW-THRU OPENINGS



PLAN TO ACCOMPANY A
NOTICE OF INTENT
AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

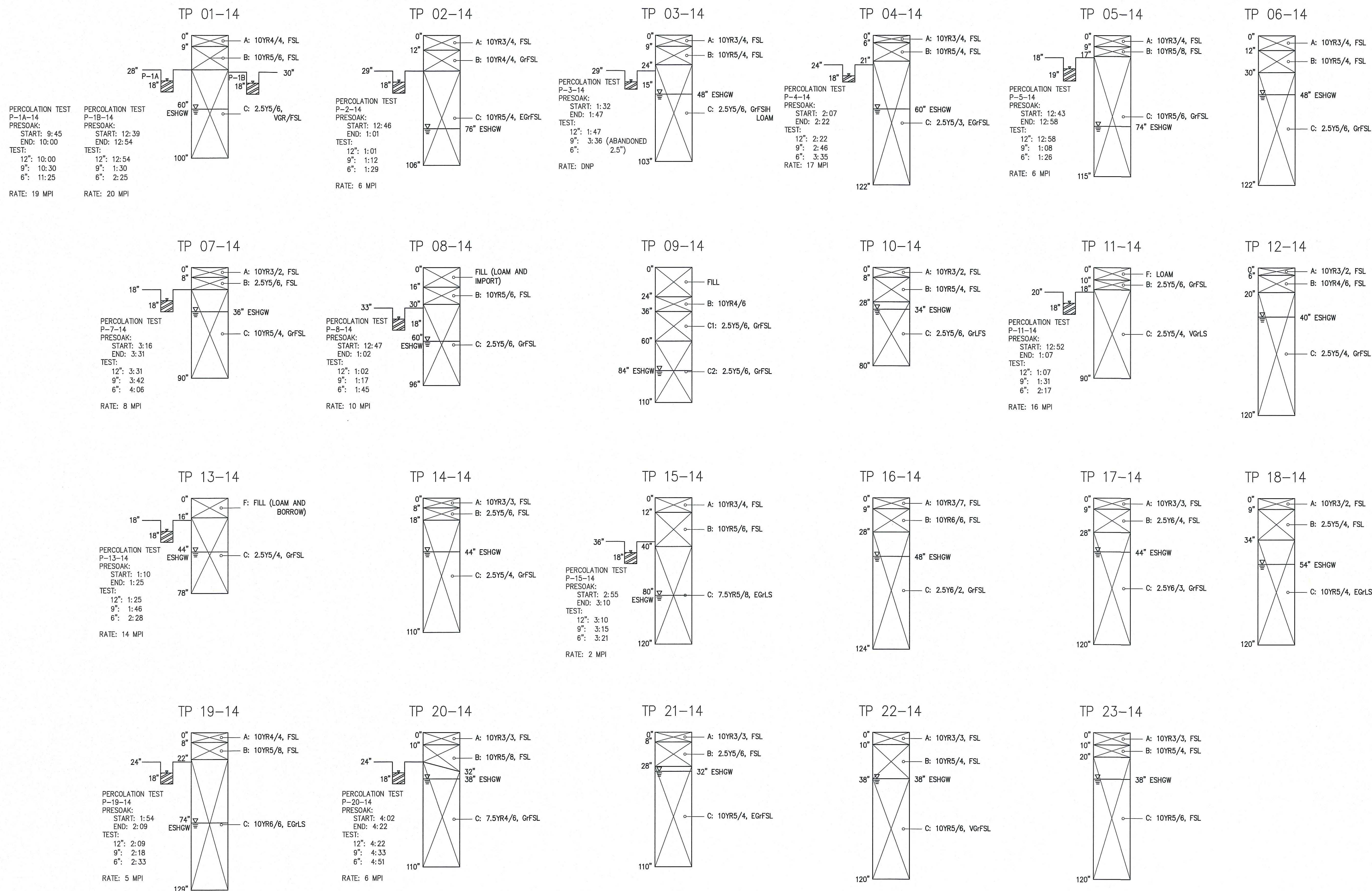
The
Morin-Cameron
GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET • U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



SOIL LOGS

DATE PERFORMED: JULY 21ST - JULY 31ST, 2014
PERFORMED BY: SCOTT P. CAMERON, SE #3024
WITNESSED BY: JOHN COULON, TOPSFIELD BOH



PLAN TO ACCOMPANY A
NOTICE OF INTENT

AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

The
Morin-Cameron
GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

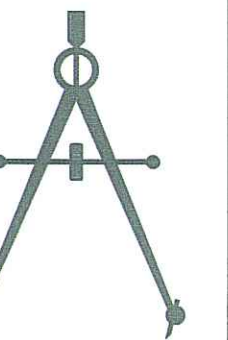


Figure 2a. Mitigation Elements Plan
57 Perkins Row | Topsfield, MA

LK/MJD 06/19/2015
Revised: MJD 10/06/2015

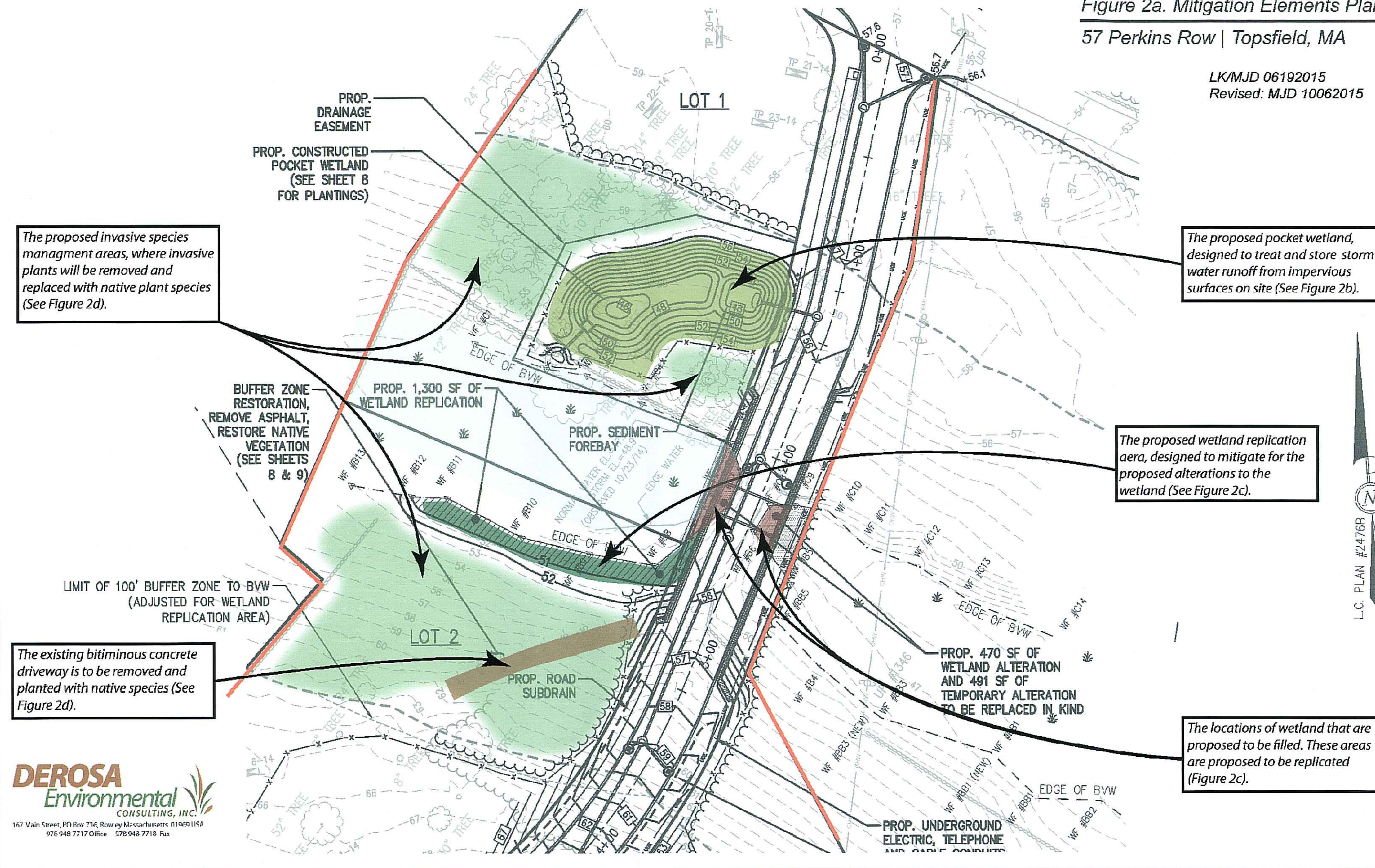
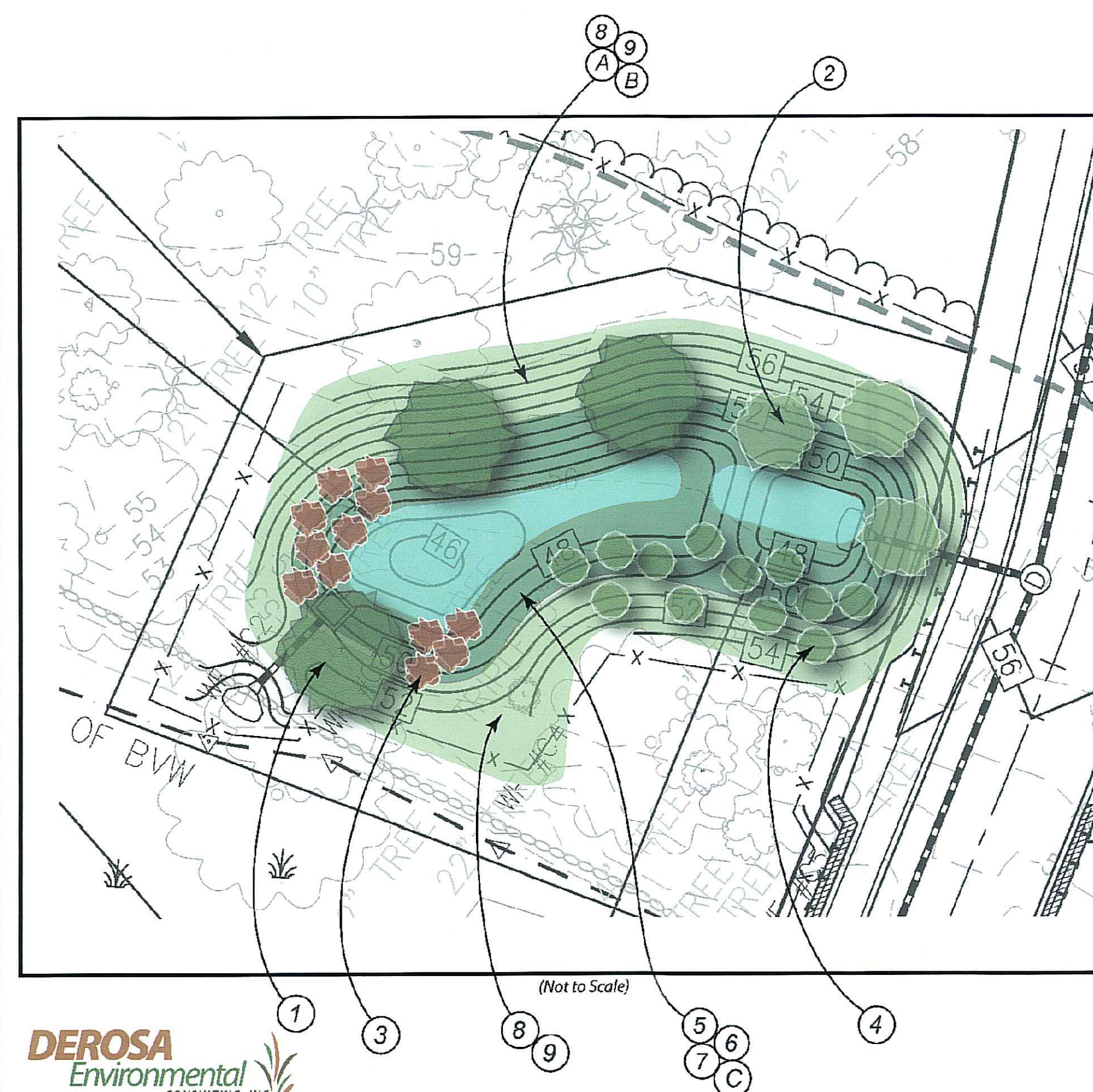


Figure 2b. Pocket Wetland Planting Plan
57 Perkins Row | Topsfield, MA

LK/MJD 6/19/2015
Revised: 10/06/2015 MJD



POCKET WETLAND PLANT LIST 57 PERKINS ROW TOPSFIELD MA				
Common Name	Botanical Name	Indicator	Size	Quantity
1. Tupelo	Nyssa biflora	OBL	1.5" cal	3
2. Red Maple	Acer rubrum	FAC	1.5" cal	3
3. Winterberry	Ilex verticillata	FACW	3 gallon	12
4. Redosier Dogwood	Cornus sericea	FACW	3 gallon	12
5. Woolgrass	Scirpus cyperinus	OBL	1 gallon	25
6. Tussock Sedge	Carex stricta	OBL	1 gallon	50
7. Soft Rush	Juncus effusus	OBL	1 gallon	25

UPLAND SLOPE PLANT LIST 57 PERKINS ROW TOPSFIELD MA				
Common Name	Botanical Name	Indicator	Size	Quantity
8. Coneflower	Rudbeckia laciniata	UPL	1 gallon	50
9. Sundial Lupine	Lupinus perennis	UPL	1 gallon	50

General Notes:

1. Base plan prepared by The Morin-Cameron Group, Inc., Topsfield, Massachusetts, dated June 10, 2015.
2. Planting notes added by DeRosa Environmental Consulting, dated June 19, 2015.
3. Soils to be augmented with 10 to 12 inches of a custom soil mix consisting of 1:1:1, sand:compost:loam.
4. Pocket wetland to be graded 1 foot below proposed grade and infill with custom soil mix to ensure saturation of planting media and contact with water table.
5. Plants to be installed by a restoration specialist.
6. Locations of individual plants are approximate and subject to change based on site specific conditions at the time of planting.
7. Installation of plantings are to be done by hand, but for larger ball and burlapped stock and trees, a small backhoe or mini-excavator may be used for this material.
8. Irrigation shall be provided by owner, as needed, during the first two (2) growing seasons, or until plants have established.

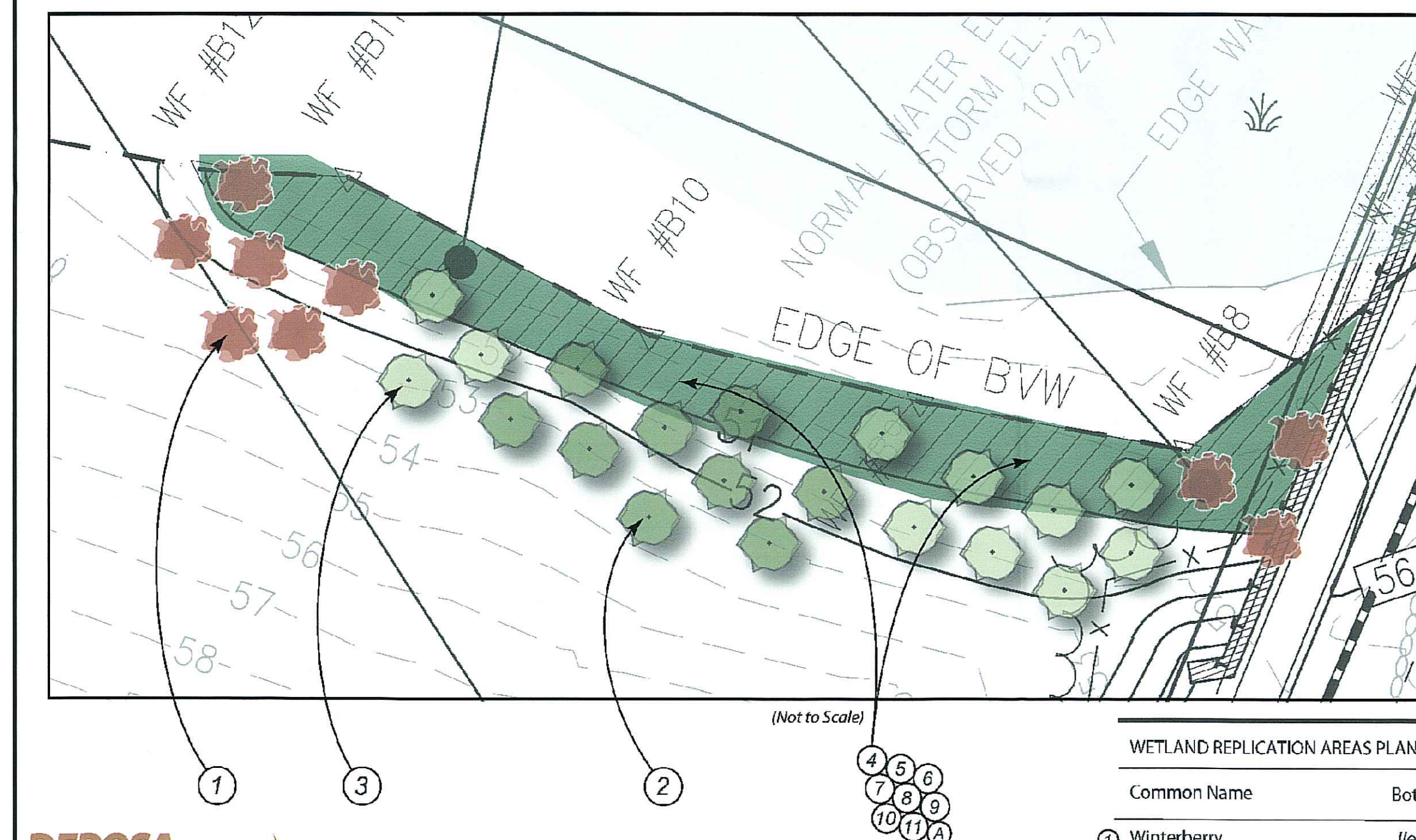
Michael J. DeRosa
PWS No. 2250

SEED MIX SPECIFICATIONS

- (A) Custom Upland Seed Mix includes: Indian grass (UPL), switchgrass (FAC), upland bentgrass (FACU), tickgrass (FAC), little bluestem (FACU), big bluestem (FAC), and sand dropseed (UPL) (10 lbs)
- (B) Custom Wetland Seed Mix includes: soft rush (OBL), sensitive fern (FACW), riverbank wildrye (FACW), rough bentgrass (FACW), fowl bluegrass (FACW), Virginia wildrye (FACW) (5 lbs)
- (C) Corliss North Shore Shady Mixture includes: creeping red fescue (FACU), tall fescue (FACU), perennial ryegrass (FACU), chewings fescue (UPL), rough bentgrass (FACW) (10 lbs)

Figure 2c. Wetland Replication Planting Plan
57 Perkins Row | Topsfield, MA

LK/MJD 6/19/2015
Revised 10/06/2015 MJD



General Notes:

1. Base plan prepared by The Morin-Cameron Group, Inc., Topsfield, Massachusetts, dated June 10, 2015.
2. Planting notes added by DeRosa Environmental Consulting, dated June 19, 2015.
3. Soils to be augmented with 10 to 12 inches of a custom soil mix consisting of 1:1:1, sand:compost:loam.
4. Replication area to be graded 1 foot below proposed grade and infill with custom soil mix to ensure saturation of planting media and contact with water table.
5. Plants to be installed by a restoration specialist.
6. Locations of individual plants are approximate and subject to change based on site specific conditions at the time of planting.
7. Plant symbols do not necessarily indicate single plants and may indicate groupings of plants.
8. Installation of plantings are to be done by hand, but for larger ball and burlapped stock and trees, a small backhoe or mini-excavator may be used for this material.
9. Irrigation shall be provided by owner, as needed, during the first two (2) growing seasons, or until plants have established.

Michael J. DeRosa
PWS No. 2250

WETLAND REPLICATION AREAS PLANT LIST | 57 PERKINS ROW | TOPSFIELD MA

Common Name	Botanical Name	Indicator	Size	Quantity
1. Winterberry	Ilex verticillata	FACW	3 gallon	9
2. Redosier Dogwood	Cornus sericea	FACW	3 gallon	9
3. High-bush Blueberry	Vaccinium corymbosum	FACW	1 gallon	9
4. Woolgrass	Scirpus cyperinus	OBL	1 gallon	12
5. Tussock Sedge	Carex stricta	OBL	1 gallon	12
6. Soft Rush	Juncus effusus	OBL	1 gallon	12
7. Sensitive Fern	Onoclea sensibilis	FACW	1 gallon	12
8. Joe Pye Weed	Eutrochium maculatum	OBL	1 gallon	12
9. Swamp Milkweed	Asclepias incarnata	OBL	1 gallon	12
10. Water Iris	Iris versicolor	OBL	1 gallon	12
11. Bonset	Eupatorium perfoliatum	FACW	1 gallon	12

MITIGATION &
PLANTING PLANS

DRAWING NO.

8 OF 9

PROJ. #3274
DRAWING: 3274 MAIN

DEROSA
Environmental
CONSULTING, INC.
167 Main Street, 3rd Floor, Topsfield, Massachusetts 01969 USA
978-887-7717 Office • 978-887-7718 Fax

PLAN TO ACCOMPANY A
NOTICE OF INTENT

AT
57 PERKINS ROW
IN
TOPSFIELD, MASSACHUSETTS

PREPARED FOR
NEW MEADOWS DEVELOPMENT, LLC

DATE: JUNE 25, 2015

REVISED: OCTOBER 6, 2015

SCALE: 1"=40'

ZONING DISTRICT: INNER RESIDENTIAL AND
AGRICULTURAL (IRA)

The
Morin-Cameron
GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01963
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

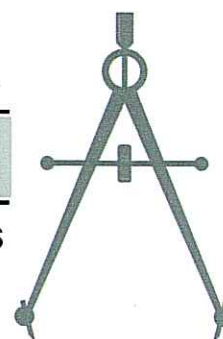
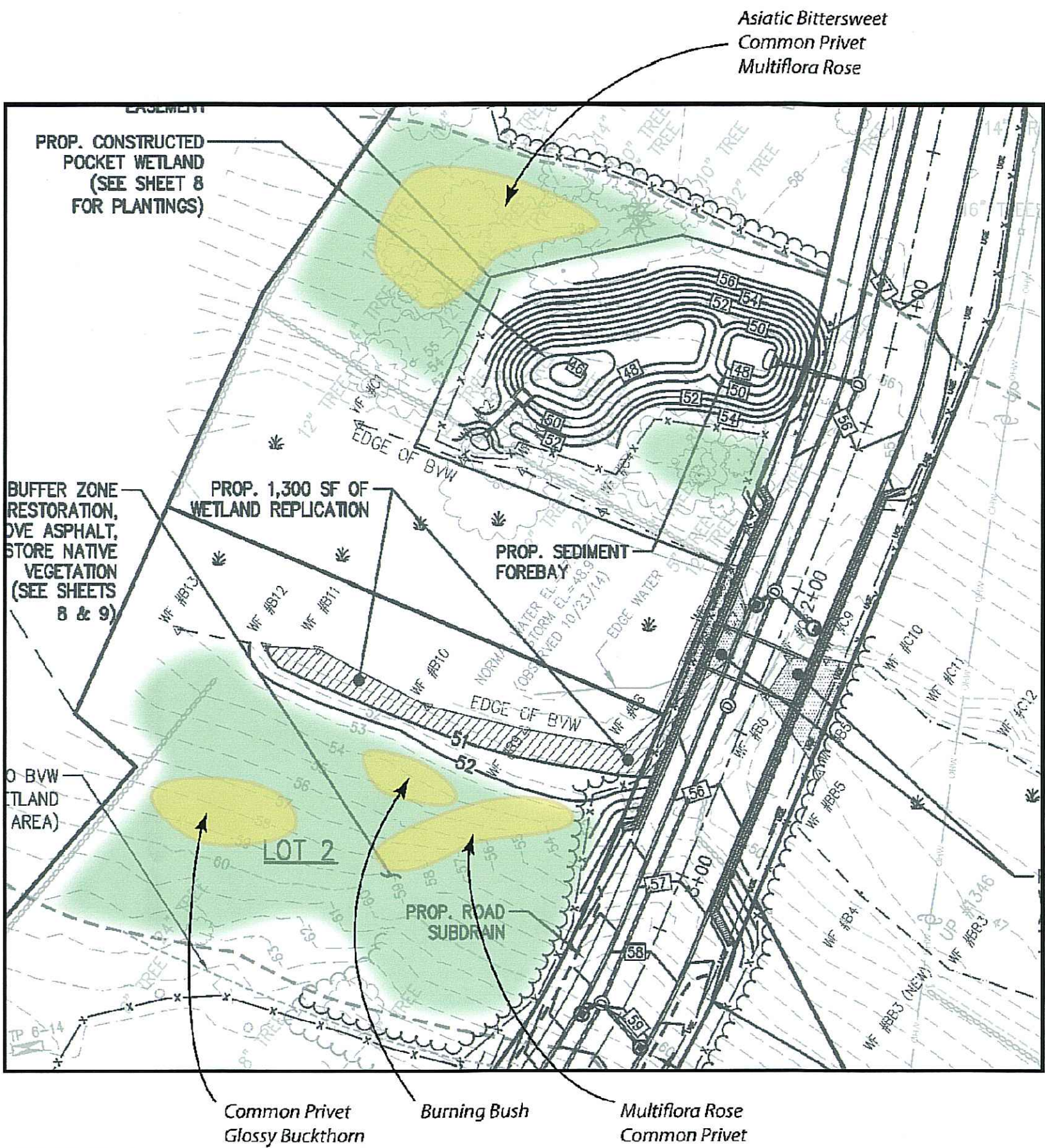


Figure 2d. Invasive Species Management Plan
57 Perkins Row | Topsfield, MA

LK/MJD 6/19/2015
Revised 10062015 MJD



DEROSA
Environmental
CONSULTING, INC.
167 Main Street, P.O. Box 716, Rowley, Massachusetts 01969 USA
978-943-7717 Office - 978-943-7718 Fax

General Notes:

1. Base plan prepared by The Morin-Cameron Group, Inc., Topsfield, Massachusetts, dated June 10, 2015 and revised October 6, 2015.
2. Planting notes added by DeRosa Environmental Consulting, dated June 19, 2015.
3. Soils to be augmented, as necessary, with a custom soil mix consisting of 1:1:1, sand:compost:loam.
4. Understory removal of invasive species will be conducted using whole plant removal techniques.
5. If invasive species are identified that are not located on this plan, they will be removed using whole plant removal. Identification of invasives is to be conducted by a restoration specialist.
6. Native plant material will be installed in the locations where invasive species have been removed. The plants will be chosen from the plant list found on this plan and locations will be determined on site based on site conditions at the time of planting.
7. Installation of plantings are to be done by hand, but for larger ball and burlapped stock and trees. A small backhoe or mini-excavator may be used for this material.
8. Irrigation shall be provided, as needed, during the first two (2) growing seasons, or until plants have established.

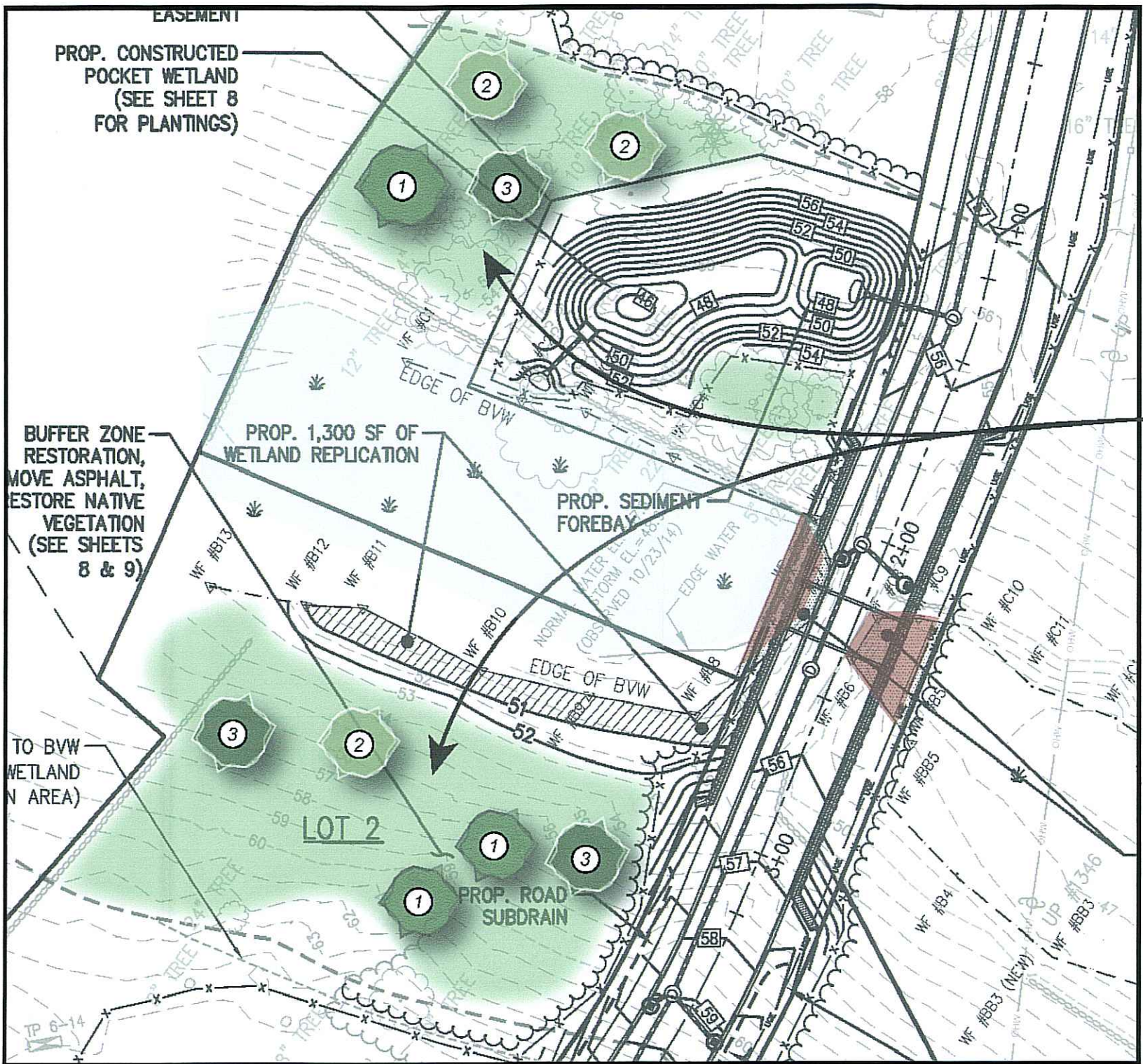
Michael J. DeRosa
PWS No. 2250

Michael J. DeRosa



Figure 2e. Upland Restoration Planting Plan
57 Perkins Row | Topsfield, MA

LK/MJD 6/19/2015
Revised 10062015 MJD



SEED MIX SPECIFICATIONS

- (A) Carliss North Shore Shady Mixture includes: creeping red fescue (FACU), tall fescue (FACU), perennial ryegrass (FACU), chewing fescue (UPL), rough bentgrass (FACW)

(10 lbs)

DEROSA
Environmental
CONSULTING, INC.
167 Main Street, P.O. Box 716, Rowley, Massachusetts 01969 USA
978-943-7717 Office - 978-943-7718 Fax

UPLAND RESTORATION PLANT LIST | 57 PERKINS ROW | TOPSFIELD MA

Common Name	Botanical Name	Indicator	Size	Quantity
1 Red Oak	<i>Quercus rubra</i>	FACU	1.5" cal	3
2 American Beech	<i>Fagus grandifolia</i>	FACU	1.5" cal	3
3 Shagbark Hickory	<i>Carya ovata</i>	FACU	1.5" cal	3
4 Witch Hazel	<i>Hamamelis virginiana</i>	FACU	3 gallon	25
5 Low-Bush Blueberry	<i>Vaccinium angustifolium</i>	FACU	1 gallon	50
6 Little Bluestem	<i>Schizachyrium scoparium</i>	FACU	1 gallon	50

(Note: to be installed in areas where invasive plants have been removed.)

General Notes:

1. Base plan prepared by The Morin-Cameron Group, Inc., Topsfield, Massachusetts, dated March 10, 2015 and revised October 6, 2015.
2. Planting notes added by DeRosa Environmental Consulting, dated June 19, 2015.
3. Soils to be augmented, as necessary, with a custom soil mix consisting of 1:1:1, sand:compost:loam.
4. Understory removal of invasive species will be conducted using whole plant removal techniques.
5. If invasive species are identified that are not located on this plan, they will be removed using whole plant removal. Identification of invasives is to be conducted by a restoration specialist.
6. Native plant material will be installed in the locations where invasive species have been removed. The plants will be chosen from the plant list found on this plan and locations will be determined on site based on site conditions at the time of planting.
7. Installation of plantings are to be done by hand, but for larger ball and burlapped stock and trees. A small backhoe or mini-excavator may be used for this material.
8. Irrigation shall be provided, as needed, during the first two (2) growing seasons, or until plants have established.

Michael J. DeRosa
PWS No. 2250

Michael J. DeRosa



MITIGATION &
PLANTING PLANS

DRAWING NO.

9 OF 9

PROJ. #3274
DRAWING: 3274 MAIN